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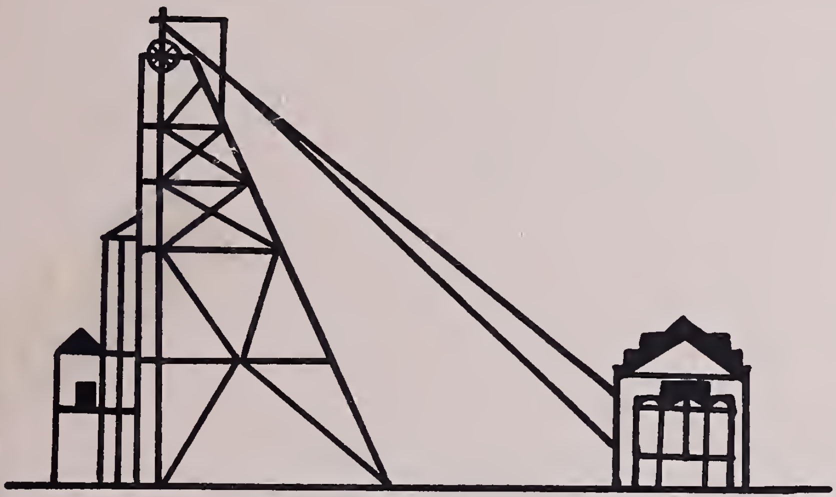

CULTURAL RESOURCE INVENTORY AND EVALUATION

of

Selected Abandoned Coal Mines in the Bull Mountain Coal Field

for

THE MONTANA DEPARTMENT OF STATE LANDS
1625 - 11th Avenue
Helena, Montana 59601

by

Paul Anderson

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Cultural Resource Division
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P. O. Box 3047
Butte, Montana 59702

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April 1984

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INTRODUCTION

In November of 1983 the Montana Department of State Lands (DSL) contracted with GCM Services, Inc. in Butte to perform a cultural resource inventory and evaluation of selected abandoned coal and hardrock mines in Montana. In the interest of public safety and health, the DSL, as part of the abandoned mines project, plans to close all open adits, remove hazardous structures and reclaim disturbed areas at the mines through removal, contouring and/or revegetation. This report presents the results of the inventory of several abandoned coal mines in the Bull Mountain Coal Field (Figures 1 and 2). It describes the physical setting, the historic background and the present state of the Bull Mountain Coal Field. An evaluation of sites eligible for the National Register of Historic Places and a summary of projected impact on the sites is given.

Field investigations were conducted in November of 1983. The principal investigator was Paul Anderson. Official site inventory forms are on file in the state site files at the University of Montana and are reproduced in Appendix I. All field notes, photographs and supportive information resulting from the cultural resource fieldwork will be maintained at the office of GCM Services, Inc., Butte, Montana.

The report on the Commerical Mine (also called the Roundup Coal Mining Company No. 3 Mine) was completed and submitted to the DSL in December of 1982, but is included in this report for convenience.

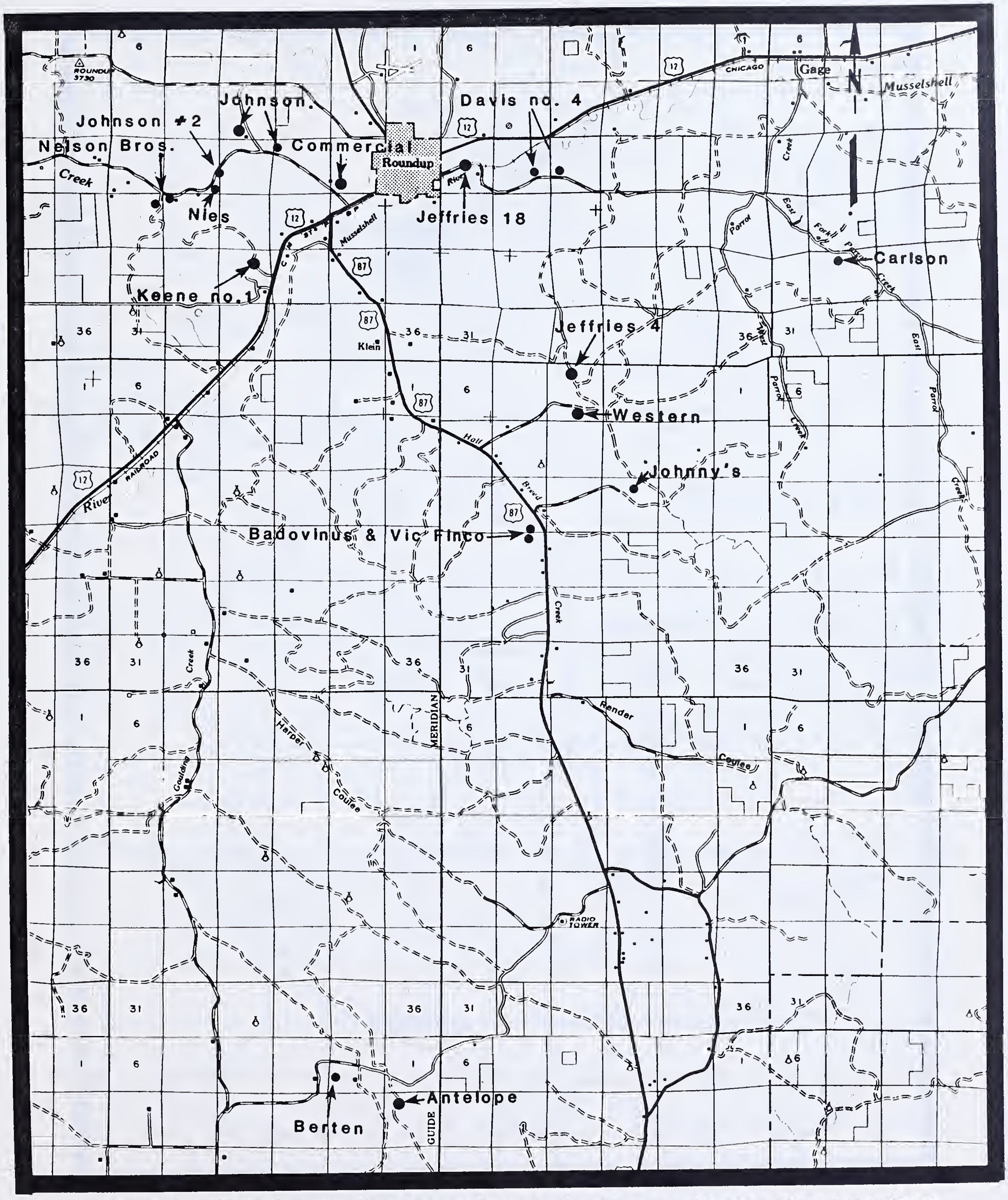

Figure 1. Map showing location of project sites in the Roundup area (BLM Land Use Map - Roundup 26 - 1" = 2½ miles).

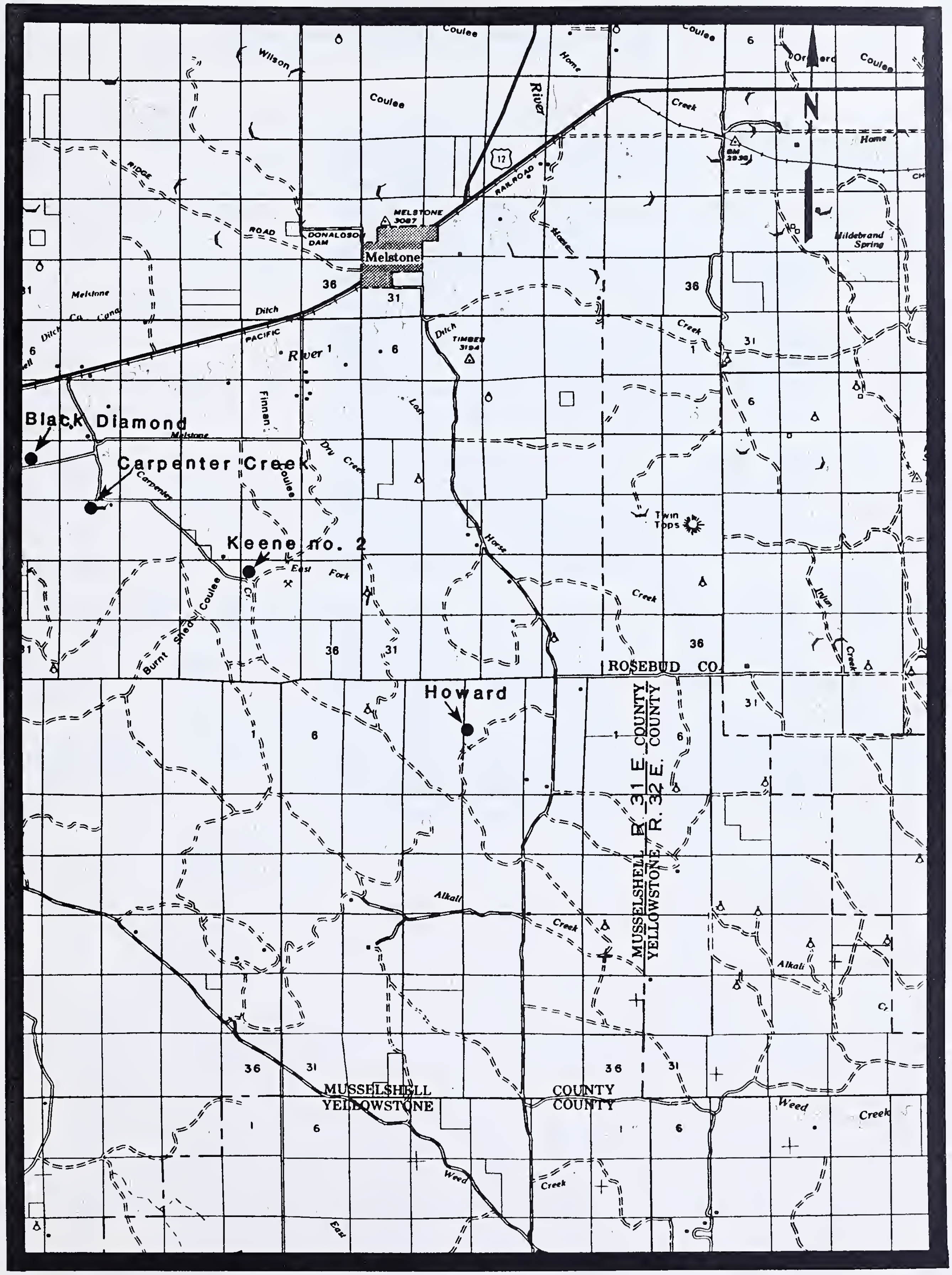

Figure 2. Map showing location of project sites in the Carpenter Creek Area (BLM Land Use Map - Sumatra 27 - 1" = 2½ miles).

LEGAL DESCRIPTION OF PROJECT MINES

Antelope:	SE1/4 NW1/4 NW1/4 Section 12, T5N R25E
Berten:	SW1/4 NW1/4 and NW1/4 SW1/4 of SW1/4 Section 2, T5N R25E
Badovinus and Vic Finco	SW1/4 SW1/4 SE1/4 Section 17 and NW NW NE Section 20, T7N R26E
Johnny's:	NW1/4 SW1/4 NE1/4 Section 15, T7N R26E
Western:	NW1/4 SE1/4 SW1/4 Section 4, T7N R26E
Jeffries Section 4	NE1/4 NE1/4 NW1/4 Section 4, T7N R26E
Carlson:	SW1/4 SE1/4 NW1/4 Section 29, T8N R26E
Keene No. 1:	SW1/4 and NW1/4 NE1/4 Section 28, T8N R25E
Nies:	SE1/4 SE1/4 SE1/4 Section 17, T8N R25E
Nelson Brothers	SW SE Section 17 and NW NE Section 20 T8N R25E
Square Deal:	SE1/4 NE1/4 SE1/4 Section 17, T8N R25E
Johnson (Original):	SW1/4 NW1/4 NW1/4 Section 15, T8N R25E SE1/4 SW1/4 SE1/4 Section 9, T8N R25E SW1/4 SE1/4 SE1/4 Section 9, T8N R25E
Johnson No. 2	N1/2 Section 16, T8N R25E
Commercial (Roundup No. 3):	N1/2 NW1/4 Section 23 and SW1/4 SW1/4 SW1/4 Section 14 T8N R25E
Jeffries Section 18:	N1/2 SW1/4 Section 18, T8N R25E
Davis No. 4:	NW1/4 SW1/4 Section 16 and NW1/4 SE1/4 Section 17 T8N R26E
Black Diamond:	S1/2 SE1/4 NW1/4 Section 18, T9N R30E
Carpenter Creek:	NW1/4 NW1/4 NE1/4 Section 20, T9N R30E
Keene No. 2:	NW1/4 SW1/4 NW1/4 Section 26, T9N R30E
Howard:	SW1/4 NW1/4 Section 3, T8N R31E

METHODOLOGY

The project areas were carefully examined through a pedestrian inventory following standard archeological survey procedures. These pedestrian surveys are designed to provide the most complete coverage of an area possible. Undisturbed areas were systematically examined for possible prehistoric activities. At many of the mine sites, large areas have been severely disturbed by mining operations and, had there been any prehistoric cultural materials, they would have long since been buried or destroyed.

The survey is designed to meet all legal requirements of the National Historic Preservation Act 1980 Amendments, it provides all necessary data to allow agency review for National Register of Historic Places (NRHP) eligibility and a determination of the effect of the proposed action.

All sites located are recorded on standard site forms and are assigned a site number by the state site files office at the University of Montana under the trinomial system of the Smithsonian Institution. Each site is examined and measured, and a sketch map is drawn showing the location of artifacts cultural features and/or structures and their relationship to natural features within the site area.

Collection of artifacts are limited to diagnostic or patterned tools at prehistoric sites, and selected artifacts at historic sites which might aid in dating the site.

Subsurface testing is conducted in order to establish the presence or absence of buried cultural materials. The need for testing on prehistoric sites is determined on a site by site basis at the discretion of the project director. Testing of historic sites is generally dependent on prefieldwork review of the literature which might indicate the presence of significant buried features or structures.

Each site is photographed in black and white negative and color positive film, and each structure on historic sites is photographed to show all significant aspects of the structure.

Prior to the initiation of fieldwork, the state site files at the University of Montana, Montana Historical Society's Historic Preservation Office files, and the Montana Fish and Game Commission's Historic Sites Compendium were searched for previously recorded sites in the area. The Bureau of Land Management's records division in Billings, Montana was consulted for relevant GLO Plat maps, historic survey plat maps and historical indices showing site ownership and other historical features in the vicinity of the sites.

The Historic Sites Compendium lists two sites in the Bull Mountains. The Elijah Janich homestead is described as a prime example of indigenous architecture of the prairie homestead era. The one-room log cabin was built in 1908 on 30 Mile Mesa, about 13 miles south of Roundup. The other site is the Thirty Mile Mesa Village which is located in this same area and is an example of a prehistoric campsite with wickiup dwelling structures.

The state site files revealed 10 sites which were within the vicinity of one or more of the project mine sites. Three sites were located in T8N R25E and include: 24ML14, a wickiup in section 19; 24ML165, the Commerical Mine in section 14 recorded by the Mineral Rsearch Center in 1982; and the Klein Mine (24ML143) recorded by HRA in 1982. Two sites have been recorded in T8N R27E: 24ML166, a log cabin in section 2 and 24ML158, a lithic scatter in section 8. Five sites have been recorded in T5N R25E. A timber lodge (24ML559) is located in section 21 and a stone ring and horse camp site (24ML401) is found in section 23. The remaining three sites are located in section 12, which is also the location of the Antelope Mine site (24ML182). Two sites (24ML558 and 24ML557) are petroglyphs and 24ML556 is a rock shelter.

The Historic Sites Compendium rates Musselshell as having a high potential for future archeological sites. The area would also be expected to contain historic homestead sites and other abandoned coal mines. No previously recorded sites will be impacted by the current Department of State Lands abandoned mines reclamation program.

In compiling the background information for the mines, it was found that documentary evidence on some of the individual mines is non-existent or sketchy at best. Few written records were kept at some of the mines and little notice was given to the smaller mines by either the government or the local newspapers. In many cases, a major source of information are local informants who owned, worked in or knew of the mines. While this information is invaluable - and in some cases the only source available - given the length of time that has passed since many of these mines were in operation, it is understandable that some of the data and dates on the sites might not be exact.

GENERAL FEATURES AND PHYSIOGRAPHY OF THE PROJECT AREA

The project area is located within the Bull Mountains in southcentral Montana. With a maximum elevation of about 1,430 m (4700 ft) and a maximum relief of about 550 m (1800 ft), the Bull Mountains are not one of Montana's major mountain ranges. The terrain, however, is quite rugged in many areas and distinct from the surrounding countryside which consists, for the most part, of rolling prairie typical of the Northern Great Plains region. Although the Bull Mountains are relatively dry, much of the terrain has been severely eroded with steep, narrow valleys surrounded by nearly flat plateaus of uplands. The erosion of clay shale which lie in alternating horizontal beds with resistant sandstone has led to the creation of these sharply incised valleys, along with sandstone outcrops and rimrock formations.

The Bull Mountains are drained by both the Yellowstone River in the southern part of the area and by the Musselshell which flows through the northern part of the field. Most of the tributaries which drain into the Musselshell and Yellowstone rivers are, for the most part, intermittent, although they often flood during heavy runoff. Numerous springs are found in the northern part of the field with good water at fairly shallow depths. In the southern part of the field, underground water is of poor quality and is scarce because of the northerly dip of the rocks which causes the water to move north.

Climate

The climate of the Bull Mountains is typical of the Northern Great Plains. It is characterized as a semiarid region with most of the precipitation occurring in the spring and autumn and only rarely during the summer. This region of Montana lies within a chinook belt where sudden warm, dry southwesterly winds can cause extreme changes of temperature during the winter. The region is noted for dramatic weather changes due to the fact that it is often a boundary area of cold air and warm air weather systems. The temperature spread in the area can span over a 150° F with summer highs well over 100° F and winter lows exceeding minus 40° F.

Vegetation

Large areas of the Bull Mountains are covered with ponderosa pine forest. Due to the semiarid climate, the trees are generally of small size but in places, especially in the heads of the coulees, the stands of trees can be dense. Juniper are also found in the uplands and higher slopes, while cottonwood trees are along the Musselshell River. Large areas of the Bull Mountains are used for grazing land with the open patches supporting a variety of range grasses including bluebunch wheatgrass, western wheatgrass and bluegrass. *Rhus* is found in some of the drainages while patches of sagebrush grow throughout the area.

Geology

The geology of the Bull Mountains is briefly summarized by Woosley as follows:

> Throughout the Bull Mountains, coal of value occurs chiefly in the Fort Union formation. These rocks form the Bull Mountains and the surrounding country. In these rocks coal beds are most numerous in the upper part, that is, in the Bull Mountain mesas, where they occur at intervals of 50 feet or less; in the lower part the intervals are 100 feet or more.
>
> In this locality the Fort Union formation presents a thickness of 1,400 feet, but this probably does not represent the whole formation, a portion having been removed by erosion, for it reaches a thickness of several thousand feet in neighboring localities, such as the Bighorn Basin on the south. It is composed chiefly of gray to buff sandstone alternating with gray shale. The sandstone, though extremely variable, is commonly massive and evenly distributed throughout the section. The base of the formation is strongly marked by contrast with a band of olive-green clay shale, which belongs to the next lower formation. Some of the best exposures are found on the east side of Dean Creek, and the same greenish shale may be seen a short distance north of the river at Roundup. In a general way this shale outlines the extent of the rocks bearing important coal beds, though it must not be supposed that everywhere the Fort Union formation contains coal beds of workable dimensions.
>
> The geologic structure of this region is simple. In general, the rocks lie flat. Careful observations, however, disclose a slight and consistent dip of 1° to 3° in a northeasterly direction on the southwest margin of the field, but this dip flattens toward the mountains and turns northward at their eastern extremity. On the northeast side of the mountains near the head of Fattig Creek, the rocks dip slightly toward the southwest, and near Roundup the dip in this direction is very pronounced. Thus the structure of the field....suggests a gentle syncline plunging slightly toward the northwest (Woolsey 1908:62-63).

PREHISTORIC BACKGROUND

William Mulloy (1958) established a comprehensive chronology for the prehistoric Northwestern Plains, thus giving researchers a framework within which to place site interpretations and analyses. Mulloy's chronology divided the prehistoric period into an Early, Middle and Late (11,500 B.C.-2250 B.C., 2550 B.C.-A.D. 450, and post A.D. 450 respectively). Mulloy recognized that his chronological structure and the Northwestern Plains geographic area were "broad concepts and open to change".

Frison (1978) refined the chronology to include Paleo-Indian, Early Plains Archaic, Middle Plains Archaic, Late Plains Archaic and Late Prehistoric. Within the chronological divisions established by Frison, selected sites are discussed below with emphasis on the prehistory of the Bull Mountain area.

Paleo-Indian Period

The Paleo-Indian period is generally assumed to have its origins in the beginning of the Holocene. Clovis points dating at approximately that time have been found widely distributed throughout the Northwestern Plains. Three possible Clovis points were recovered from the Lindsay Mammoth site in Wyoming, dating respectively 9975 B.C., 9030 B.C., and 8760 B.C. (Frison 1978). Isolated finds have been recorded in the Yellowstone River drainages. Folsom points followed the Clovis along with a gradual disappearance of the mammoth. This point type appears to have been most popular around 8500 B.C. In Montana, the MacHaffie site near Helena contained Folsom points.

According to Frison (1978), at approximately 8050 B.C. some of the Paleo-Indian groups were beginning to diverge from a predominantly big game hunting complex to a hunting and gathering subsistence base. The Hell Gap, Agate Basin, Eden Valley and Alberta projectile point types and the Cody knife were the type tools associated with these cultural complexes. These have been found throughout Montana and surrounding plains states and prairie provinces. During this time period the climate is assumed to have been cool and the fauna to include mammoth, camels, various large bison species and other animals, many of which are extinct today.

As the climate became warmer, leading up to the Atlantic climatic period, subsistence/ cultural patterns began to shift from an apparent intensive dependence on large game animals to a more varied diet. There was also an apparent trend to relate more closely to the foothills and mountains as opposed to the open plains (Frison 1973: 310). This change is characterized by the cultures of the Late Paleo-Indian period, Frederick, Lusk, Pryor Stemmed and Lovell Constricted projectile points being the representative point types of these cultures, and although they are generally not as well made as the earlier Clovis, Folsom, and Cody Complex types, they exhibit parallel flaking. The assemblages indicate a diversity of activities by these populations, and no great dependence on big game procurement.

Early Plains Archaic

The Early Plains Archaic period appears to have coincided with the beginning of the Altithermal climatic period. Until recently it was thought that relatively few Indians occupied the Northern Great Plains during the Altithermal. However, through recent extensive surveys, it has become apparent that a number of cultures did occupy the foothills and higher relief areas of the Northwestern Plains. To date, few sites of the Early Plains Archaic have been recorded for the open Plains area. This may suggest either an hiatus of occupation at that time, the incomplete survey of the open Plains area, or failure in the identification of Early period materials.

Middle Plains Archaic

> "The appearance of the McKean Complex is almost dramatic; suddenly there is cultural evidence in an area that was hitherto relatively devoid of such evidence. During the Middle Plains Archaic period human groups moved into the open Plains and the interiors of intermountain basins, and they seem to have increased their emphasis on plant foods. In the dry interior of the Bighorn Basin, for example, the diagnostic artifacts (besides projectile points) are the flat sandstone grinding slab and sandstone mano. . . Along with these are found large numbers of roasting pits" (Frison 1978:46-47).

The Middle Plains Archaic (3000 B.C.-1000 B.C.) is represented in central and southern Montana by numerous reported sites. However, few have been excavated and thoroughly analyzed. Generally known as the McKean Complex, from the type site in northeastern Wyoming (Mulloy 1954), sites of the period are characterized primarily by three projectile point types which range, and intergrade, from the lanceolate McKean to the stemmed Duncan to the corner-notched Hanna. Milling stones and other artifacts and features representing vegetable food procurement and use are also common with McKean occupation sites. Small and large campsites, as well as bison kills, are associated with McKean materials and are found in a wide variety of ecological zones, from the high mountain country to the river valleys. The large number of sites suggests a general increase in the populations at this time and a consequent expansion of these populations into niches not heavily utilized by man previously. This population expansion correlates temporally with the cooling trend of the subBoreal as presented by Bryson et al. (1970).

For the Pine Breaks area of southeastern Montana an area similar topographically to the Bull Mountains, approximately 20% of the sites which can be dated typologically or otherwise, belong to the Middle Archaic period.

Late Plains Archaic

For the region, the Late Plains Archaic is characterized by several varieties of corner-notched projectile points known as Pelican Lake. From the number of sites reported, this period appears to be a time of considerable population increase. Projectile points are relatively large, made probably for the atlatl rather than the bow, suggesting that the population increase is not the result of a definable technological change which is reflected in projectile point manufacture. The

climate, as we can deduce from the available evidence, was trending toward a slightly cooler and moister period. This may have been a climatic episode similar to the historically documented Little Ice Age when the plains-mountain environment experienced an increase in available forage. This in turn allowed more animals to be supported and the human populations to expand accordingly.

In southeastern Montana sites falling typologically into this time period make up 42% of the total temporally classifiable sites (Fredlund 1981). For the Montco project, a 16,000 acre area on the east side of the Tongue River just south of Colstrip, Waldman reports 50% of temporally identifiable prehistoric sites are Late Archaic (Waldman 1979). Reeves (1978) notes a high percentage of Pelican Lake phase sites in Alberta. This suggests that the Pelican Lake groups were utilizing and maximizing the potential of the Pine Breaks country and the high plain to the north. It is probable that the Bull Mountains will exhibit a similar high ratio of sites of Late Archaic periods affiliation.

During the latter part of the Late Archaic and into the Late Prehistoric, another population of bison hunters is typified by large side notched projectile points known as Besant. Numerous Besant sites are reported from the plains of eastern Montana, North Dakota, Alberta, Saskatchewan, and Manitoba. Byrne (1973) suggests that Besant coexisted with the later Avonlea groups until quite late, and gradually merged with them.

Late Prehistoric Period

The Late Prehistoric period begins approximately A.D. 200 and runs into the Protohistoric period when European goods (including the horse) were introduced into the region. The technological change distinguishing this period is the widespread change to the utilization of small side-notched projectile points, generally assumed to be accompanied by the adoption of the bow as the primary weapon. To produce these small side-notched arrow points, the basic techniques of projectile point manufacture were altered. Small expanding flakes were easily struck from crypotocrystalline cores to make small projectile points. This manufacturing technique was not as time-or material consuming as previous projectile point manufacturing techniques. However, other tool types appear to change little technologically or morphologically. Besides the adoption of the bow and arrow as the common weapon, pottery became common in most areas (Fredlund 1981).

Within the Late Prehistoric period the numerous projectile point styles vary and grade on a continuum from the small corner-notched Avonlea points through a sequence of side and finally tri-notched points. In most cases all of these "types" are of a similar dimension in notchwidth, body width and thickness, with the only variation being the location of the notches which are, in many cases, asymmetrically placed. Length is quite variable in all instances, often related to breakage and reworking of the point. By the latter part of the Late Prehistoric period, tri-notched types began to predominate.

For southeastern and central Montana most of the datable sites are from the Late Prehistoric period.

Protohistoric

With the advent of the horse, the plains Indian entered a new period - the Protohistoric. In addition to the horse, which facilitated the hunting of bison, items such as cold hammered metal projectile points and European beads make their appearance. The 3H site (Heffington 1983) between Billings and Roundup contained a copper projectile point and a knife blade. Sites in the Bull Mountains and in Hoskins Basin (e.g. Doktordik Petroglyphs) contain depictions of rifles and horse motifs thus placing these sites in the Protohistoric period. Explorers Petroglyph on Thirty Mile Mesa south of Roundup, Montana is the only known representation by Indians of explorers and a boat. This petroglyph must date either the Lewis and Clark expedition or one of the later expeditions of the fur traders and explorers (Conner and Conner 1971).

HISTORIC BACKGROUND OF THE BULL MOUNTAINS

The existence of coal in the Bull Mountains was probably known to local ranchers and homesteaders during the latter half of the 19th century and small amounts may have been dug from the surface outcrops for domestic use. The first serious study of the field was made by Waldemar Lindgren and George H. Eldridge in 1881 for the Transcontinental Survey (Leonard et al. 1907). The results of their studies were published in the Report of the Tenth Census in 1886. The section on the Bull Mountains described the rocks and stratigraphy of the mountains and generally described the nature, extent and physical appearance of the coal beds. In 1889 G. C. Swallow briefly described the coal field in the Montana State Mine Inspector's Report. He mentioned that the coal was high in sulphur and would not be very useful except as a domestic fuel. He estimated the Bull Mountains would yield approximately 800 million tons of coal (Swallow 1889). However, as it turned out, the coal would be widely used and the total reserves would amount to some 9.5 billion tons (Chadwick 1973).

Being unaware of Swallow's dour evaluation, the Northern Pacific Railroad Company in 1880 developed a small mine in section 23, T6N R27E. However, the long distance to the railroad made it unprofitable to continue the operation. Later a car load of coal was reported to have been taken from the mine and shipped to Anaconda but no further attempt was made for the next two decades to continue mining coal in the Bull Mountains (Woolsey et al. 1917).

Large-scale development of the Bull Mountain coal field first got underway when the Chicago, Milwaukee, and St. Paul Railway built its Pacific Coast extension through Montana in 1908. The Bull Mountain field was ideally situated to provide coal for the railroad since it was the only significant coal deposit along the right-of-way between Iowa and central Washington. Even before the railroad arrived from the east, the first coal mine was begun by the Republic Coal Company in anticipation of the railroad's need for coal. The mine - named the Republic No. 1 - was located south of the town of Roundup and was opened in 1907. The company attempted to work the Roundup coal bed by means of a slope which extended under the river but they encountered severe flooding problems and had to abandon the mine. The company then attempted to develop the coal bed by enlarging an air shaft on the south side of the Musselshell River which had been intended for the first mine. The shaft was driven to a depth of 137 feet where a six foot wide bed of clean coal was encountered. The coal was mined by the room and pillar methods and operated until 1912 (Woosley et al. 1917; Chadwick 1973).

During this same period the Republic Coal Company opened their No. 2 mine on the Roundup coal bed near the center of section 36, T8N R25E. The mine operated from a 347 foot shaft and during its first year produced 84,082 tons of coal. By 1917 the mine was producing from 300,000 to 400,000 tons annually. The Republic No. 2 was destined to become the largest producer in the Bull Mountain field and one of the longest lived mines in the area, finally closing in 1956. The town of Klein grew up around the mine and by

1917 had some 1,500 inhabitants. Roundup also grew to a similar size during this period, changing from a sleepy cow town to a booming coal camp (Woosley et al. 1917; Chadwick 1973; Travis and Turnbull 1950; Musselshell Valley Historical Museum 1974).

The original townsite of Roundup was actually located near the confluence of Halfbreed Creek with the Musselshell about a mile southwest of the town's present location. The "town", which had existed since 1883, was little more than a stage depot, post office and saloon. The saloon was run by one of the area's early pioneers, Mike Klein. When the railroad was built through the area Klein not only made a fortune with his saloon and land holdings but also achieved a bit of local fame when the Republic Coal Company's Number 2 mine and adjacent town were named after him (Musselshell Valley Historical Museum 1974; Alwin 1983).

The present town of Roundup was established in 1907-1908 when the railroad built its Pacific Coast extension along the Musselshell. The town became, like most mining communities, a polyglot of different languages and ethnic groups. Initially Roundup had a reputation as a wide-open, sometimes violent town. Betty Wetzel, who grew up in Roundup during this period remembers:

> feuds and fights, shootings and murders were everyday occurrences. The divorce rate was a scandal for the time. Suicides were frequent. The Associated Press confided to the town editor that more juicy news came out of Roundup than from any other town in the state, including Butte (Wetzel 1983:60).

Eventually the town settled down to become a trade center as well as a mining town, with a remarkably stable population over the past 70 years. Klein, however, all but disappeared following the closure of the No. 2 mine.

In 1910 Republic Coal Company expanded its operation when it acquired the Davis mine, two miles east of Roundup. The combined production of the Davis and its Klein mine exceeded 800,000 tons and employed 600 men. The Republic Coal Company sold almost all of its coal to the railroad for locomotive fuel, but the arrival of the railroad also meant that coal could be economically sold to other markets. Numerous mines were opened during this period to meet the increasing demand for coal throughout the area--including the Keene, Prescott, Jeffries, Gunther, and Gildroy (Morgan 1966).

During this period the first mine was opened in the Carpenter Creek area at the eastern edge of the Bull Mountain coal field. In 1913 the Carpenter Creek Mine was begun about seven miles east of the town of Musselshell. A railroad spur was constructed to the mine from the main line of the Chicago, Milwaukee Railroad. A small community grew near the mine and at Absher, but both communities became ghost towns when the mine closed. A few small mines, such as the Black Diamond, were also started in the area. In 1946 the Keene No. 2 mine was opened on the East Fork of Carpenter Creek. The mine was a major producer with half of its production going to a hospital and power plant in South Dakota and the other half earmarked for domestic use (Cebull 1958; Travis and Turnbull 1950).

The largest, and one of the most consistent producing mines which sold coal to outside markets was the Roundup Coal Mining Company mine No. 3, also called the Commercial Mine, located about a mile west of Roundup. The mine was first opened

in 1908 to develop the Roundup bed using the room and pillar methods of mining. The coal was brought to the surface by a hoist up a slope. Annual production ranged from 200,000 to 400,000 tons. In 1947 the company sold 25,000 tons to sugar refineries in western Montana; about 40,000 tons went to the slag-treating plant of the East Helena smelter, while the remaining 135,000 tons was sold in Montana, North Dakota and South Dakota for domestic heating use. The mine continued to be a major producer until it finally closed for good in 1963 (Woosley et al. 1917; Chadwick 1973; Travis and Turnbull 1950).

The Bull Mountains also had a large number of small "wagon" mines which in many cases operated for only part of the year with a handful of men. Initially the wagon mines were dug to furnish coal to local ranchers and homesteaders who would pick it up at the mine with their own wagons (hence the origin of the term "wagon mine"). With the advent of the railroad, coal could be sold to more distant markets. The growth of Billings during the 1920s also encouraged the development of small mines, many of which were located near U.S. Highway 87 which made it easy to ship the coal to Billings. The high quality of Bull Mountain coal as a domestic fuel kept many of these small mines operating up to the 1970s when most other similar type of mines elsewhere in the state had closed due to declining demand. The Roundup mines eventually also faced a dwindling market for their product and the ones still operating in 1970 (including the Blue FLame, Johnny's, Divide, Western and the Square Deal) were forced to close soon after by new government safety regulations which required equipment the small operations could not economically afford. Some of the other small mining companies which operated in the Bull Mountains included: Johnson Coal, Carlson's Coal, Bull Mountain Coal, Midget Coal, Cooper Coal, McCleary Coal, Pine Creek Coal, Independent Mining, Northern Coal, Williams Coal, and Nies (Cebull 1958; Clawson 1970).

Throughout its history the coal mining industry in the Bull Mountains was strongly unionized. The first effective union was the Progressive Miners Union which was organized soon after the field went into production. This union then consolidated with the Knights of Labor and was formed into the United Mine Workers of America. The U.M.W.A. was closely tied to the American Federation of Labor (following the demise of the Knights of Labor) until 1938 when it joined the C.I.O. Under its charismatic leader, John L. Lewis, the U.M.W.A. reached its peak in power and membership during this period. Although the major Bull Mountain mines were heavily unionized there did not seem to be the bitter conflict between the unions and mine owners that characterized many of the coal fields in the east. Most strikes were settled quickly and seldom lasted more than a few weeks. The longest strike ocurred in 1922 and lasted for six months (Cebull 1958).

One aspect of the mining operation similar to other coal fields was the danger always associated with underground mining. The mines in the Bull Mountain field were officially classed as "non-gassy" and did not experience any catastropic mine explosions such as the one that occurred in 1943 at the Smith Mine in Red Lodge where 74 miners were killed. But like coal mines everywhere, there was a steady toll taken of miners killed and injured singly or in small groups by rock falls, accidents with mine equipment and accidental explosions when blasting at the mine faces. The Roundup Record carried articles during the life of the coal field which chronicled the deaths and injuries of the miners with monotonous regularity. The 1912 mine inspector's annual report illustrated this point with simple statistics, showing that on the average one man was killed for every 224,107 tons of coal mined and one was injured for every 58,268 tons mined (Roundup Record January 5, 1912).

The Bull Mountain field has been one of Montana's largest and most consistent producing coal districts. Like other districts it began to decline after the 1920s, although the drop was more gradual than in other coal mining areas. There was a brief revival of coal use during World War II, with production running over a million tons annually. Production declined rapidly after the war as the railroads converted to diesel and home users of coal switched to natural gas or fuel oil. The Bull Mountains remain one of Montana's largest coal reserves, with some five billion tons remaining but the depths of the coal seams and the area's rugged terrain are not condusive to strip mining and it seems unlikely that underground mining could be economically feasible in the near future. Nevertheless, new demands for coal and innovative technologies for extracting it could conceivably make the Bull Mountains coal field once again a major factor in the Montana economy.

SITE NARRATIVES

Site Identification: 24ML182 - The Antelope Mine

Location: SE1/4 NW1/4 NW1/4 of section 12, T5N R25E

Area: 36,800 m^2

Elevation: 1250 m

Description: The Antelope Mine is located on the east-facing hillside near the top of a narrow, steep coulee which runs north/south (Figure 3). The area is densely forested and rocky. An eroded gully drops off sharply to the east from the site. A switch-back road drops down from the head of the coulee to the site and then continues down the coulee. The mine facilities are for the most part on the west side of the road on one of the few relatively flat areas in the coulee. The mine entrance is at the base of the sandstone formation where the coal seam outcrops.

Structures and Cultural Materials: Feature 1 is a small (2.5 x 3.5 m) log cabin perched on the edge of the steep slope running down the coulee. Two small windows and a door are on the west side of the structure which is covered with a partially intact low peaked roof. Feature 2 is the adit portal with a collapsed wood and tin entrance shed (Figure 4). The most prominent structure on the site is feature 3, the large (5 x 20 m) wooden tipple (Figure 4). The tipple is of a relatively crude design and construction and has almost completely collapsed. Adjacent to the tipple is a wood frame (feature 4) which may have been a base for a shed. South of the tipple is a 3 x 6 m log cabin (feature 5 - Figure 5). The low peaked roof is still intact. The corners are flat-notched and a small shed-like addition has been built at the front entrance. Adjacent to the cabin is a 3 x 5 m wood and concrete foundation (feature 6). A small wood platform is located behind the cabin and foundation at the edge of the coulee and probably was part of an outhouse (feature 7). Across the road from the cabin are four mine cars (feature 8) and two more are located near the feature 1 cabin.

Historical Development: The area on which the site is located was first patented to Ivan I. Burford on February 12, 1920 under a homestead entry #734245. Additional land west of the site was acquired by Burford on January 5, 1922 under homestead entry #841041. It is not known if Burford mined on the property although the mine was said to have been established during this period of the early 1920s. The mine operated as a wagon mine furnishing coal to local ranchers and to the domestic market in Billings. The last owner was reported to be [first name unknown] Berns, who closed down the mine around 1950 (Carlson 1984).

Evaluation: The basic site integrity remains intact in the sense that the essential mine facilities and layout can still be seen. However, the two structures directly associated with the mining operation - the tipple and the mine entrance shed - have both collapsed. One structure (feature 6) has been removed and only the foundation remains. The two log cabins (features 1 and 5) remain intact and in fair condition. The overall site would be rated as only fair.

National Register Statement: Although the physical integrity of the mine's structure has been impaired, the overall site integrity remains intact within its somewhat unique and picturesque setting. The mine was a significant supplier of coal to the local ranches over a long period of time. The site is recommended as eligible for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close the mine openings, either remove or reclaim the coal waste areas and remove any hazardous structures. The mine opening is an obvious hazard and the coal waste areas are a source of pollution to the local surface water. The Department's plans should be allowed to proceed on schedule. The tipple and mine entrance shed have both collapsed and thus their removal would not constitute an adverse effect. However, it is recommended that additional photographic documentation be undertaken before any structures are removed. The entire site has been recorded, mapped and photographed and no further work other than the above recommentation should be necessary.

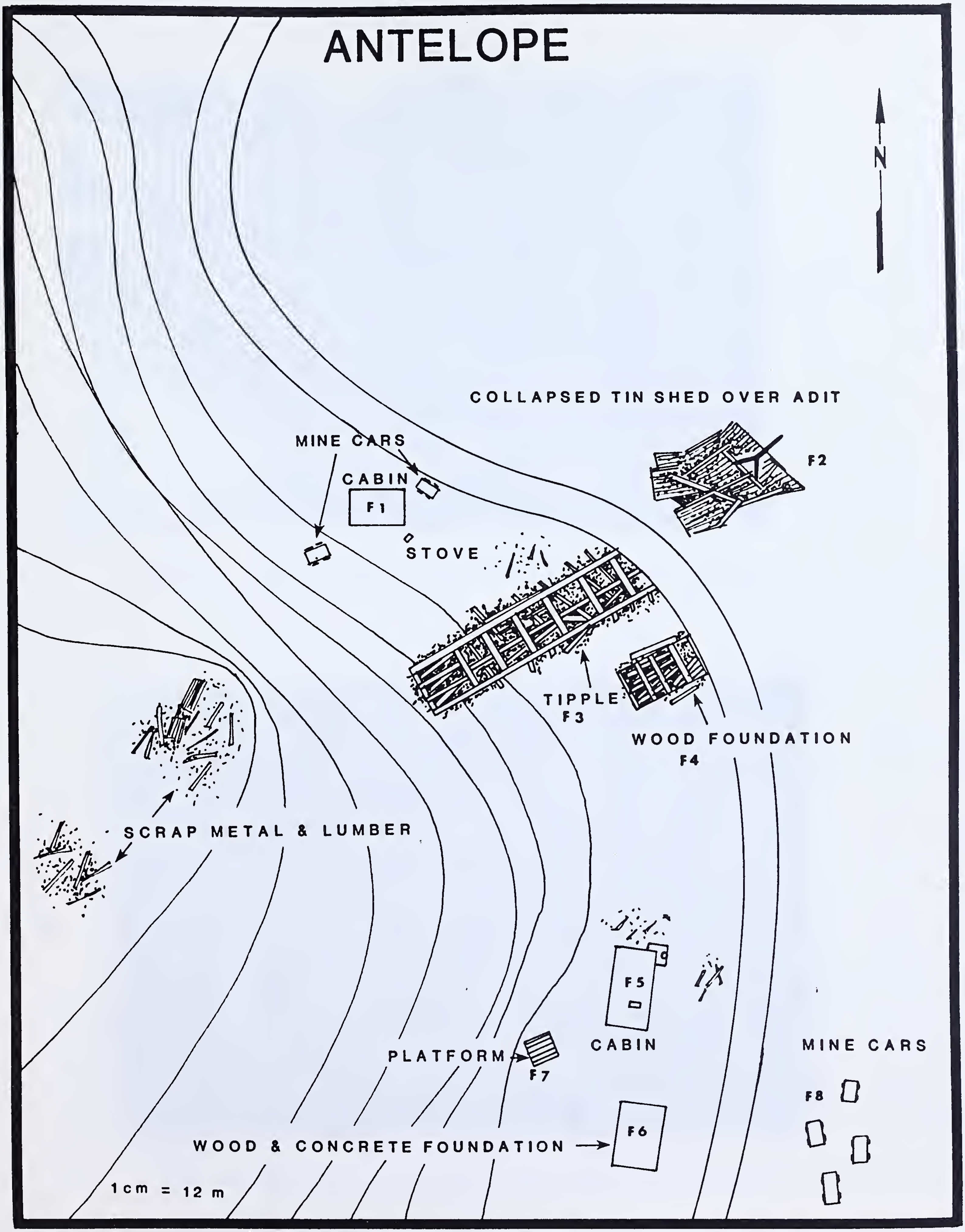

Figure 3. Site map of Antelope Mine.

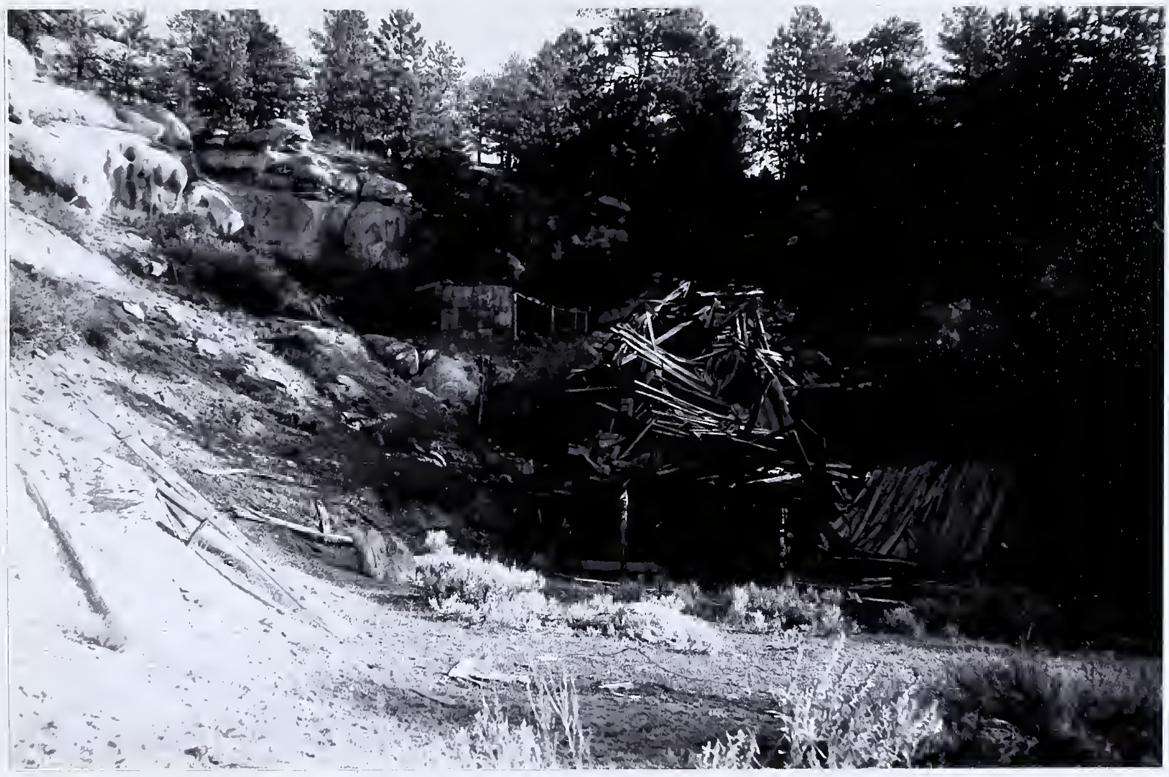

Figure 4. Antelope Mine portal and tipple (view to east).

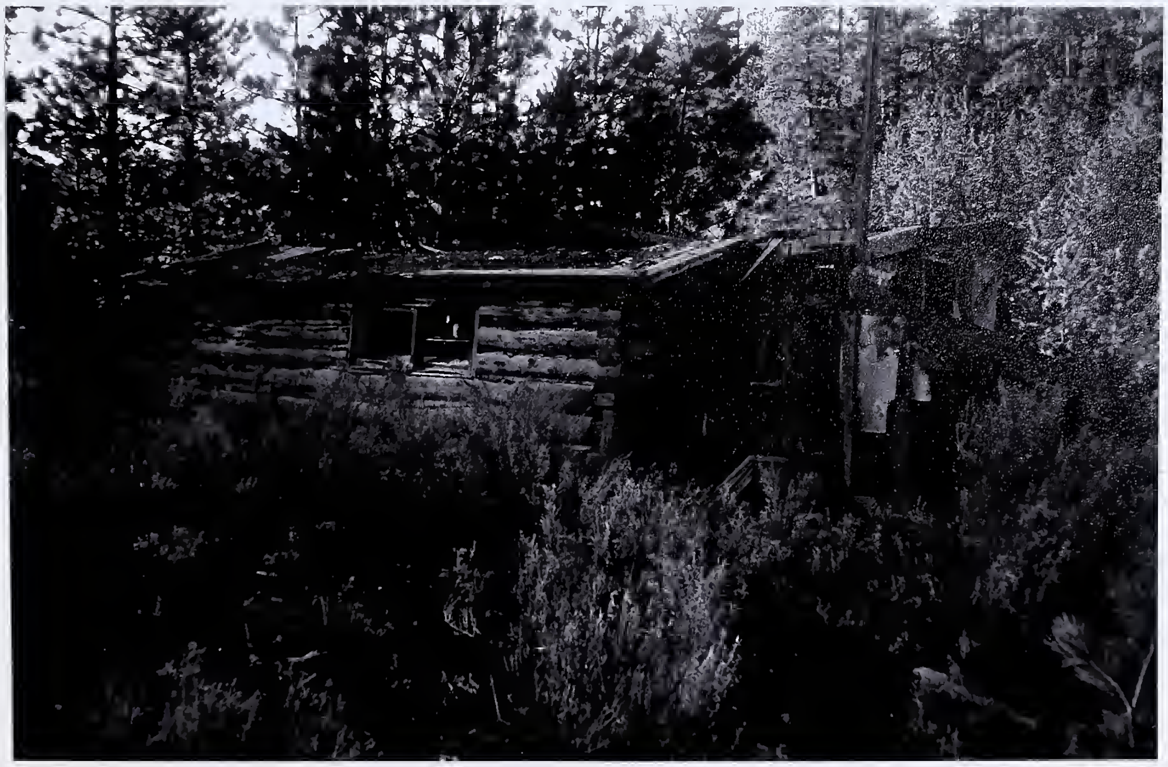

Figure 5. Cabin at the Antelope Mine (view to northwest).

Site Identification: 24ML183 - Berten Mine

Location: Sw1/4 NW1/4 and NW1/4 SW1/4 of SW1/4 of section 2, T5N R25E

Area: 12,000 m^2

Elevation: 1256

Description: The site is a small coal mine located near the head of a small north/south trending coulee (Figure 6). Adit openings have been driven into the west-facing side of the coulee and coal waste from the mine has spread down the stream bed south of the mine. A shed, the remains of a scales and the ruins of a tipple are all that remain on the site.

Structures and Cultural Materials: A wood 4 x 6 m shed (feature 1 - Figure 7) is found on the west side of coulee and at the end of the road leading to the mine from the south. Feature 2 is the 2 x 4 m foundation remains of the scales for the mine (Figure 7). On the east side of the coulee are found the collapsed ruins of the tipple (feature 3 - Figure 7); the main mine entrance portal (feature 4); and a secondary mine opening (feature 5). Large areas of coal slack are located in the stream bottom below the mine portals and a smaller slack area is found just north of the main adit entrance. The mine cars (feature 6) were observed on the site in addition to a metal stove near the shed.

Historical Development: The area on which the site is located was first patented to John P. Neumann on June 23, 1916 under a homestead entry #535140. There is no record of Neumann mining on the property although he probably leased the site area to Ben Berten who opened the mine around 1916 or 1917. The mine operated on an intermittent, small-scale for the next 25 years furnishing coal to the area's ranchers until is closed during World War II (Carlson 1984).

Evaluation: The site is in poor condition. The tipple has collapsed, the scales shed has been removed and the shed is badly deteriorated. Little else remains on the site other than the adit openings and coal waste areas. It is unlikely that further work on the site would yield any additional information.

National Register Statement: The physical integrity of the site has been seriously compromised. The site was not an important economic factor in the area nor does it have any great historical interest. The site is not recommended as eligible for listing on the National Register of Historic Places.

Management Recommendations: The Montana Department of State Lands plans either to remove or reclaim the coal waste dumps, close the mine adits and remove any hazardous structural remains. The mine openings are a serious safety hazard and the coal waste areas are a source of water pollution to West Fork Creek. It is recommended that the Department's plans should be allowed to proceed on schedule. The site has been examined, recorded, mapped and photographed and no further work is recommended.

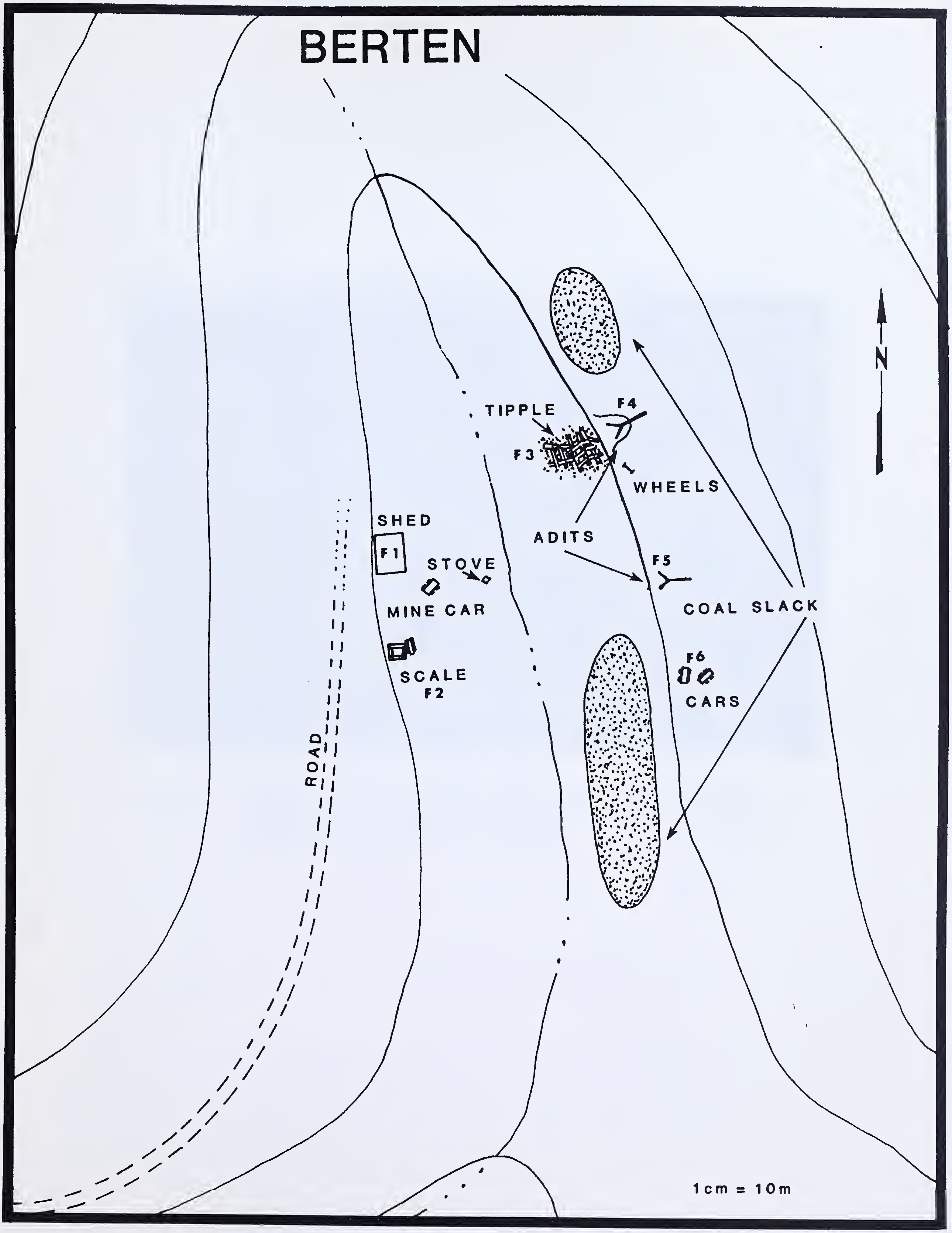

Figure 6. Site map of the Berten Mine.

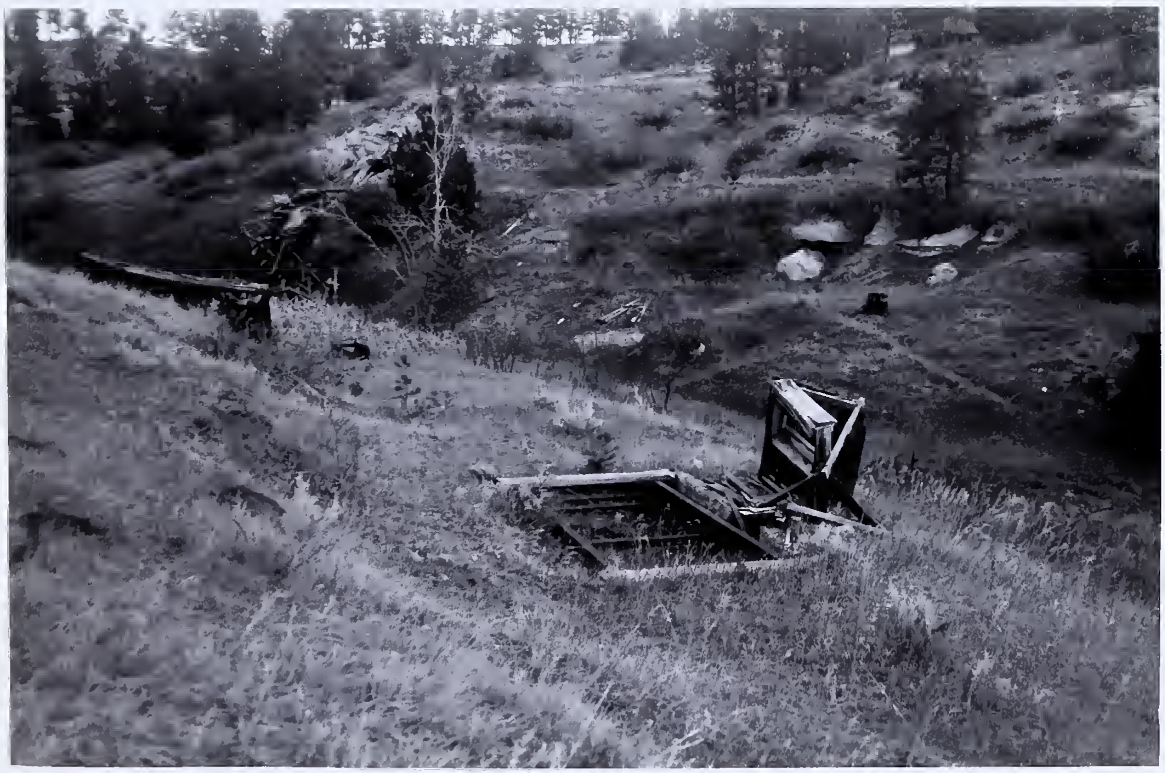

Figure 7. General view of Berten Mine showing shed (left), tipple ruins (left background), scales foundation (foreground) looking northeast.

Site Identification: 24ML184 - Badovinus and Vic Finco Mines

Location: SW1/4 SW1/4 SE1/4 section 17 and NW1/4 NW1/4 NE1/4 section 20, T7N R26E

Area: 1700 m^2

Elevation: 1079 m

Description: The site consists of two small wagon mines located on the north side of two branches of a small coulee which runs east into Halfbreed Creek (Figure 8). Both mines are driven into the base of small sandstone outcrops on the north side of the gullies. The Badovinus Mine faces an open area which runs into the stream bottom of Halfbreed Creek while the Vic Finco Mine is located in the narrow coulee which cuts into the hills just south of the Badovinus.

Structures and Cultural Materials: At the Badovinus there are two open adit portals at the base of the small sandstone outcrop on the north side of the coulee (Figure 9). A 2 x 3 m wood shed is at the east end of the site area (Figure 9). West of the shed is a mine car body with a set of wheels nearby. The only other features on the site are coal waste dumps. At the Vic Finco Mine there is an open adit portal with wood debris in front of it which may have once been a small tipple (Figure 10).

Historical Development: The area on which the sites are located was patented to Charles F. Smith on October 15, 1930 as a homestead entry (#1041189). There is no record of Smith mining on the property. Both mines were established sometime later. Vic Finco was reported to have put in the first mine shortly before World War II. The mine was driven in for only a short distance when an accidental rock fall killed a miner and the operation was shut down permanently. The Badovinus Mine was started by George Badovinus during the 1960s. The mine reportedly ran for only a year or so and then shut down because of the poor quality of the coal (Carlson 1984; Elasson 1983).

Evaluation: The site is in poor condition with little remaining from the original mining operation (which was most likely not very extensive at any point). The only standing structure is the small shed at the Badovinus and it is of little significance. The mines were only small operations of no great importance to the local economy. It is unlikely that further work on the site would reveal any additional information.

National Register Statement: The physical integrity of the sites has been destroyed. Neither site is recommended for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close the mine openings and either remove or reclaim the coal waste areas. The open adits are an obvious safety hazard while the coal waste areas are a source of pollution to Half Breed Creek. It is recommended that the Department's plans be allowed to proceed on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

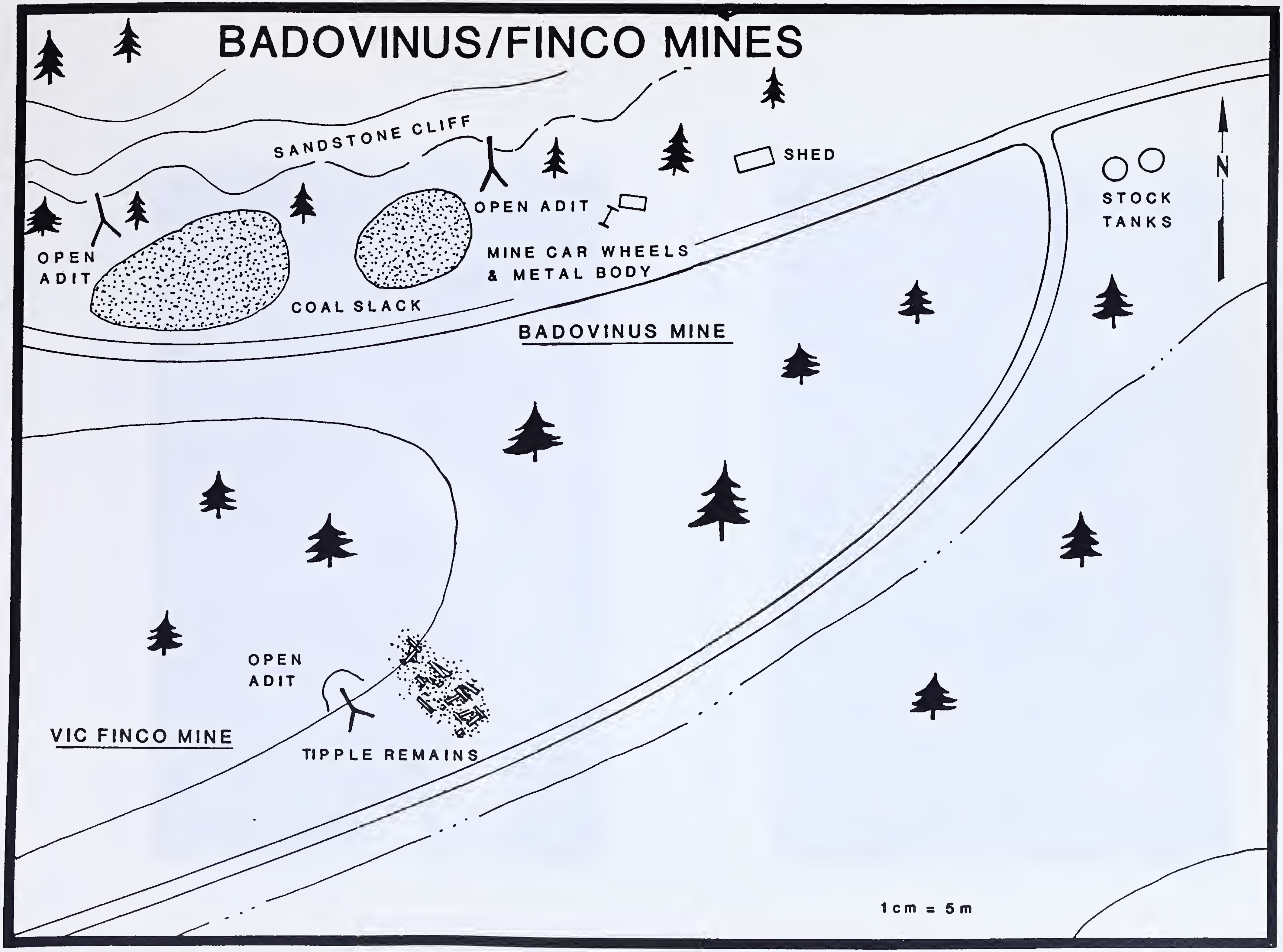

Figure 8. Site map of the Badovinus and Finco Mines.

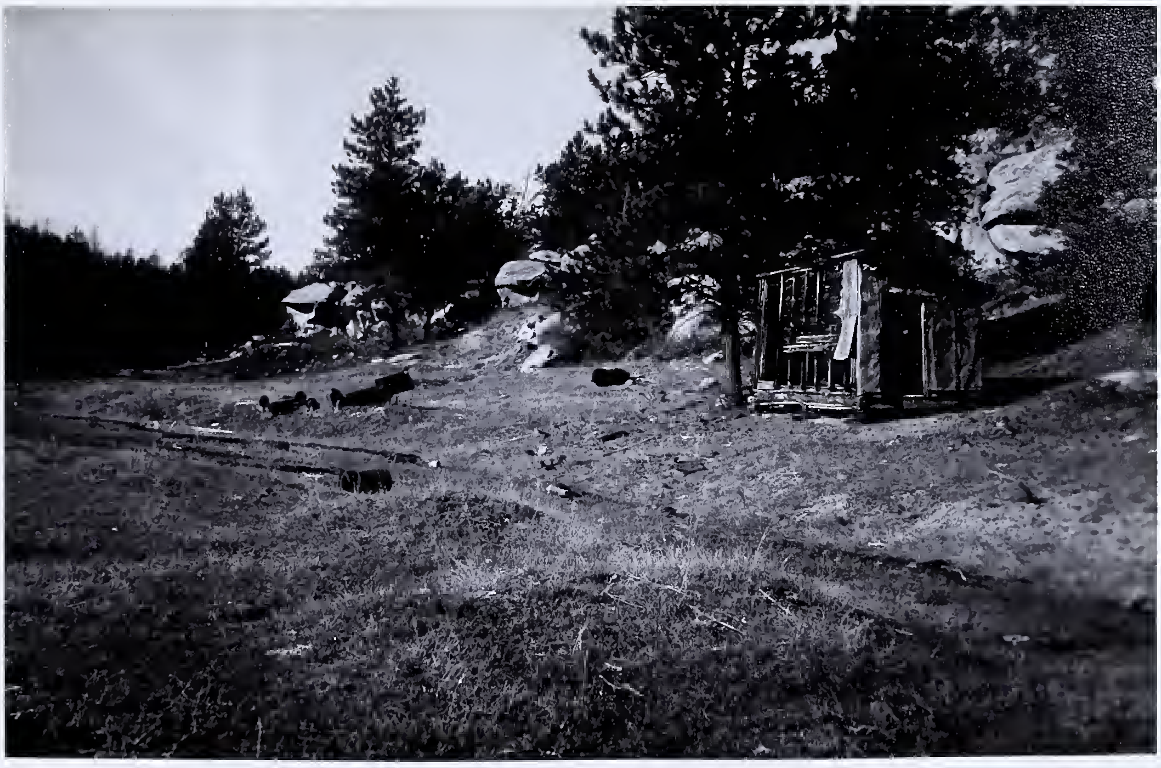

Figure 9. General view of the Badovinus Mine area looking west.

Figure 10. The adit and possible tipple remains at the Vic Finco Mine (view northwest).

Site Identification: 24ML185 - Johnny's Mine

Location: NW1/4 SW1/4 NE1/4 of section 15, T7N R26E

Area: 17,000 m^2

Elevation: 1128 m

Description: The site is the remains of one of the more substantial of the smaller coal mines in the Bull Mountains. It is located near the head of a small coulee which runs west into Halfbreed Creek (Figure 11). The mine structures remain more or less intact and convey the basic appearance of the original mining operation. A large area of coal waste is found down the coulee from the mine. The entire site area is surrounded by low hills with a fairly dense cover of pine trees.

Structures and Cultural Materials: At the entrance to the mine site is the scales shed (feature 1 - Figure 12) which measures 2 x 5 m with the concrete scales pit on the south side. Adjacent to the shed is an outhouse (feature 2). A large squirrel cage mine ventilation fan (feature 3) is located in front of the tipple (feature 4). The tipple (Figure 13) measures 6 x 15 m and is constructed of wood beams and lumber. It is partially intact but deteriorating. Feature 5 is a 2.5 x 6 m log cabin with square notched corners and a low peaked roof (Figure 12). The slope mine entrance (feature 6 - Figure 12) is obscured by debris from the partially collapsed mine entrance shed. Adjacent to the adit portal is a recently constructed metal roofed garage with concrete walls which measures 8 x 14 m (feature 7 - Figure 12). Behind the garage is an air shaft (feature 8) and on the hillside south from the tipple is a secondary mine opening (feature 9). A large coal waste dump covers a large area at the entrance to the mine area.

Historical Development: The Johnny's Mine was first developed around 1950 by Cross and Carl Rux who leased the property from Johnny Koesky. Originally the land was first patented to the Northern Pacific Railroad on June 2, 1907 (Patent #136). Koesky then took over the mine in 1953 and ran it on a year-around basis employing two or three miners to assist him. The mine produced coal for the local domestic market for 17 years but then ran into new Federal regulations which ultimately forced the mine to close. Prior to 1970 the Federal Bureau of Mines had made the distinction between gaseous and non-gaseous mines. The Bull Mountain mines were classed as non-gaseous and thus required less stringent ventilation and other safety measures than were required for gaseous mines. When the new Federal Coal Mine Health and Safety Act was passed, this distinction was erased. The law was designed to protect miners in gaseous coal mines, predominantly located in the eastern part of the country, but the law had the unfortunate side-effect of temporarily closing all underground coal mines in Montana. Many of the smaller operations such as Johnny Koesky's mine were unable to afford the new equipment needed to meet the new Federal regulations and were forced to close. The Johnny's Mine closed in the summer of 1970, which left only the Blue Flame, Divide, Western Coal and the Square Deal still operating in the Bull Mountain area, and all of these would close within a few years (Clawson 1970; Cross 1984).

Evaluation: The Johnny's Mine is still intact and the site is in good condition due to fact that it was in operation up to the 1970s. The tipple has been stripped of its machinery, is deteriorating and the mine entrance shed has partially collapsed. The remaining structures are intact and in fair to good condition.

National Register Statement: The site is less than 50 years old and thus is not yet old enough to be considered for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close the mine openings, remove any structures considered as hazardous, and either reclaim or remove the coal waste areas. The coal waste dumps are a source of water pollution to Halfbreed Creek and the mine openings are an obvious safety hazard. The tipple is deteriorating and is also a safety hazard. It is recommended that the Department's plans be allowed to proceed on schedule. The site has been examined, recorded, mapped and photographed and no further work is recommended.

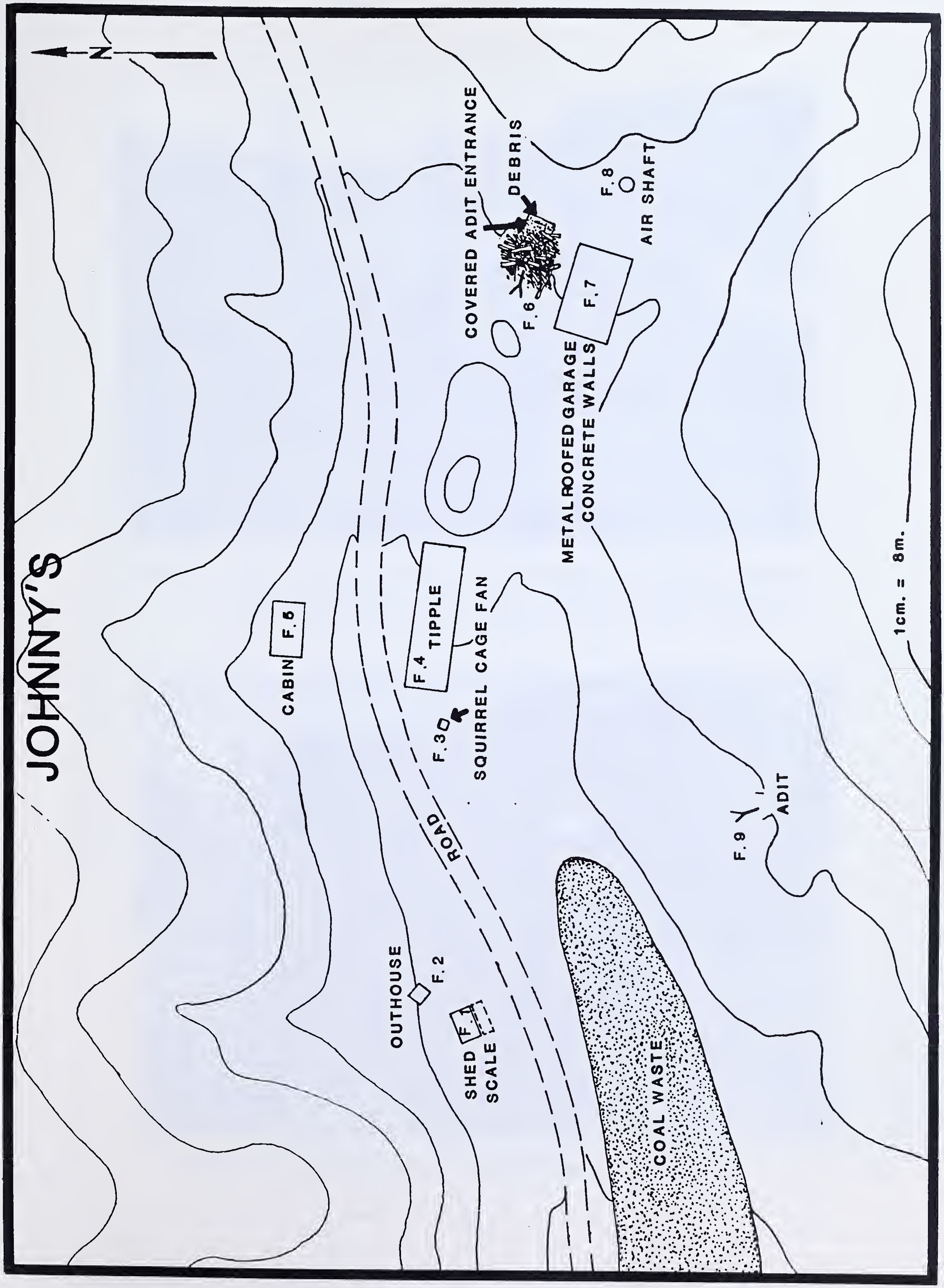

Figure 11. Johnny's Mine site map.

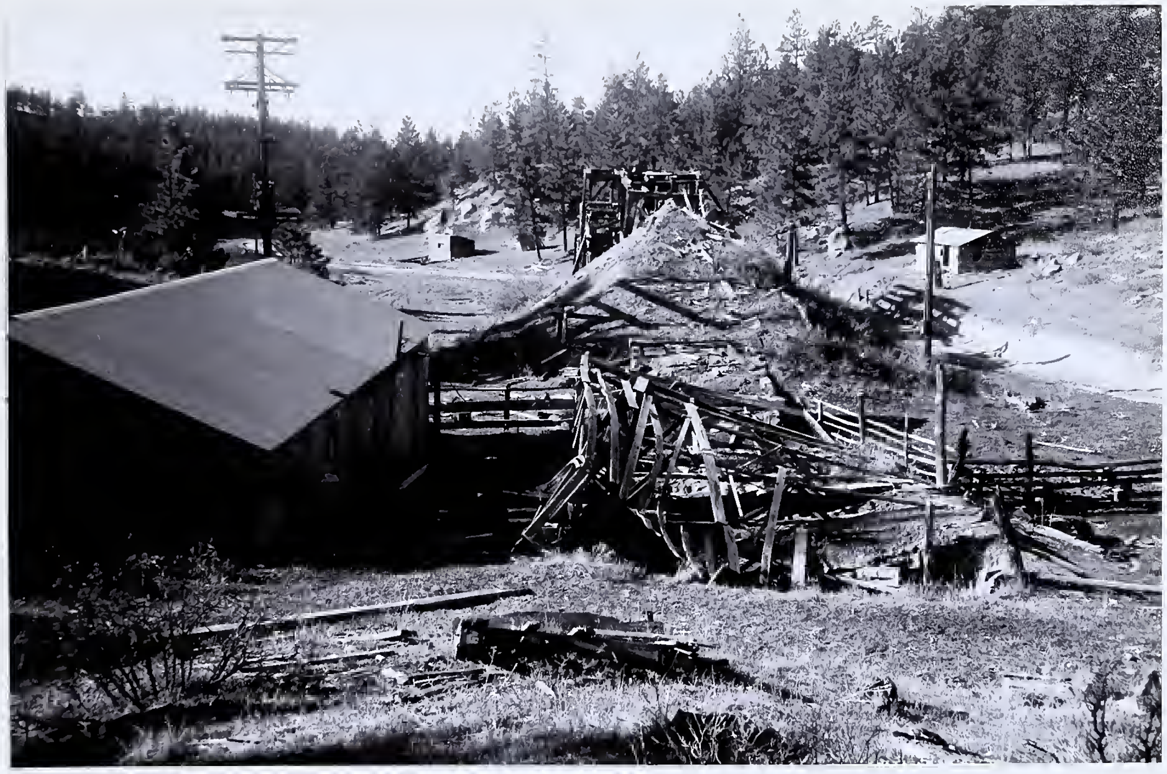

Figure 12. View (looking west) of the Johnny's Mine site showing garage (left), scales (left center background), mine entrance (center foreground) and log cabin (right).

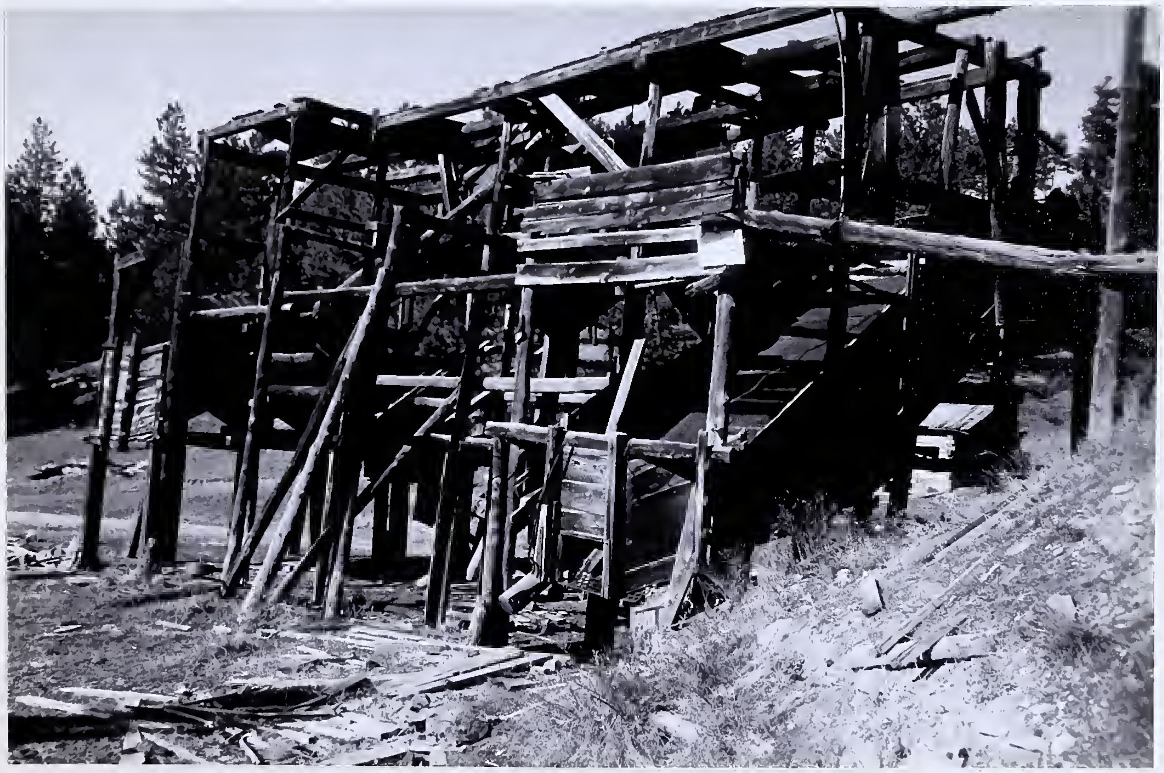

Figure 13. Johnny's Mine tipple (view to northwest).

Site Identification: 24ML186 - Western (Gantar) Mine

Location: NW1/4 SE1/4 SW1/4 of section 4, T7N R26E

Area: 29,000 m^2

Elevation: 1109 m

Description: The site consists of a moderate-size independent coal mining operation located near the head of a small coulee which flows to the west into Halfbreed Creek (Figure 14). The site area is surrounded by heavily forested low hills with occasional sandstone formations. The mining facilities, which are still intact, are located on the south side of the coulee with the slope mine entrance at the base of the north-facing hillside.

Structures and Cultural Materials: Feature 1 is a wood, slab-sided barn which measures 7 x 13 m and is covered with a low peaked roof. South of the barn is a well with a watering tank (feature 2). An outhouse (feature 3) is adjacent to a scales shack. The scales shed measuring 1.5 x 2.5 m is covered with asphalt siding (feature 4). Feature 5 is a small (2.5 x 3 m) shed covered with asphalt siding. A 8 x 10 m log barn with a peaked roof and surrounded by a pole fence (feature 6) is located at the north edge of the site. East of the barn is a well (feature 7) and east of the well is a 6 x 6 m sandstone foundation (feature 8) for an unknown structure. Further up the coulee to the east of the site is the mine's powder magazine (feature 9) which is built into the hillside with sandstones and a log roof. Feature 10 is an outhouse. The shop (feature 11) for the mine cars is a wood barn-like structure measuring 7 x 10 m (Figure 15). Tracks from the tipple to the mine branch off into the shop for servicing the mine cars. Adjacent to the shop is the adit portal shed (feature 12 - Figure 15). Adjacent to the shop on the north is a cinder block structure measuring 4.5 x 6 m (feature 13 - Figure 15). A small asphalt-sided shed (3 x 4 m) which housed the cable machinery for hoisting the mine cars from the mine workings to the tipple (feature 14 - Figure 15) is located southwest of the shop. The tipple (feature 15 - Figure 16) is a large (8 x 35 m) structure constructed of wood beams and lumber. On the south hillside is a secondary adit entrance (feature 16) and southeast from the adit is a mine air vent (feature 17). In addition, large coal waste dumps are located down the coulee (to the west) of the mine site.

Historic Development: The land on which the site is located was first patented to Luka Gantar on June 28, 1918 under a homestead entry (#638889). Gantar owned and operated the mine until the mid-1940s and it was frequently called the Gantar Mine. The operation was one of the longest-running mines in the Bull Mountains and was one of the last to close during the early 1970s. The operation was drift mine using a room and pillar method. A shortwall cutting machine was used to undercut the coal and the seams were shot down with black blasting powder. Power for the mine came from a gasoline engine-driven generator on the mine site. The mine generally operated on a seasonal basis with daily production averaging about 50 tons; it employed about seven or eight men. In 1947 the yearly production was 4000 tons. There was no railroad connection to the mine although the high-quality subituminous coal found a steady market as a local domestic fuel (Cebull 1958; Clawson 1970; Travis and Turnbull 1950; Turner 1932).

In 1944 Gantar sold out to Harley Klinger, George Badovinus and Henry Gerring who ran the mine until the early 1950s when Glen Johnson took it over. Johnson then ran it until it closed in the 1970s (although it was reported the mine continued to operate on the sly for some years after it was officially closed) (Cross 1984).

After the mine closed it had a brief revival as a mushroom farm. Glen Johnson had experimented with growing mushrooms in his mine (24ML193) during the 1950s but was unable to find a steady market. In the spring of 1972 Johnson tried again and successfully grew the delicate fungus in the Western Mine workings where the temperature and humidity were ideal for mushroom cultivation (Chadwick 1973). Following the period as a mushroom farm, the mine served as a public fallout shelter, indicated by a sign on the front of the portal. Its safety as a fallout shelter, however, was somewhat questionable since a second sign a few meters inside the entrance portal states: "Fan not working. Black Damp (CO^2) present. Death could be instantaneous."

Evaluation: The Western Mine remains intact and in fair condition which is, in part, due to the fact that the mine was in operation until fairly recently. The tipple is deteriorating and the machinery from it has been removed, but it remains as an interesting example of the type of tipple used in a small, independent mining operation such as the Western Mine. The other structures on the site are of relatively recent construction and are not of any particular significance in themselves although as a complex they show the layout, extent and appearance of the typical independent mine site.

National Register Statement: The site integrity for the Western Mine is good. It is also a good example of the type of small, independent coal mining operation which was a major economic factor in the Bull Mountains during its productive period. For these reasons the site is recommended as eligible for listing on the National Register of Historic Places under criterion A ("that are associated with events that have made a significant contribution to the broad patterns of our history...") and criterion C ("that embody the distinctive characteristics of a type...").

Management Recommendations: The Department of State Lands plans to close the mine openings, remove any structures considered as hazardous, and either reclaim or remove the coal waste areas. The coal waste dumps on this site are quite extensive and are a source of water pollution to Halfbreed Creek. The mine openings are an obvious safety hazard and in this case are more dangerous than most sites due to the presence of CO^2 in the mine. It is recommended that the Department's plans be allowed to proceed on schedule in these areas. If the tipple is ultimately classed as hazardous and must be removed, it is recommended that additional photographic coverage be carried out to further document this complex and somewhat unique piece of mining engineering. The remaining parts of the site have been recorded, mapped and photographed and no further work is recommended.

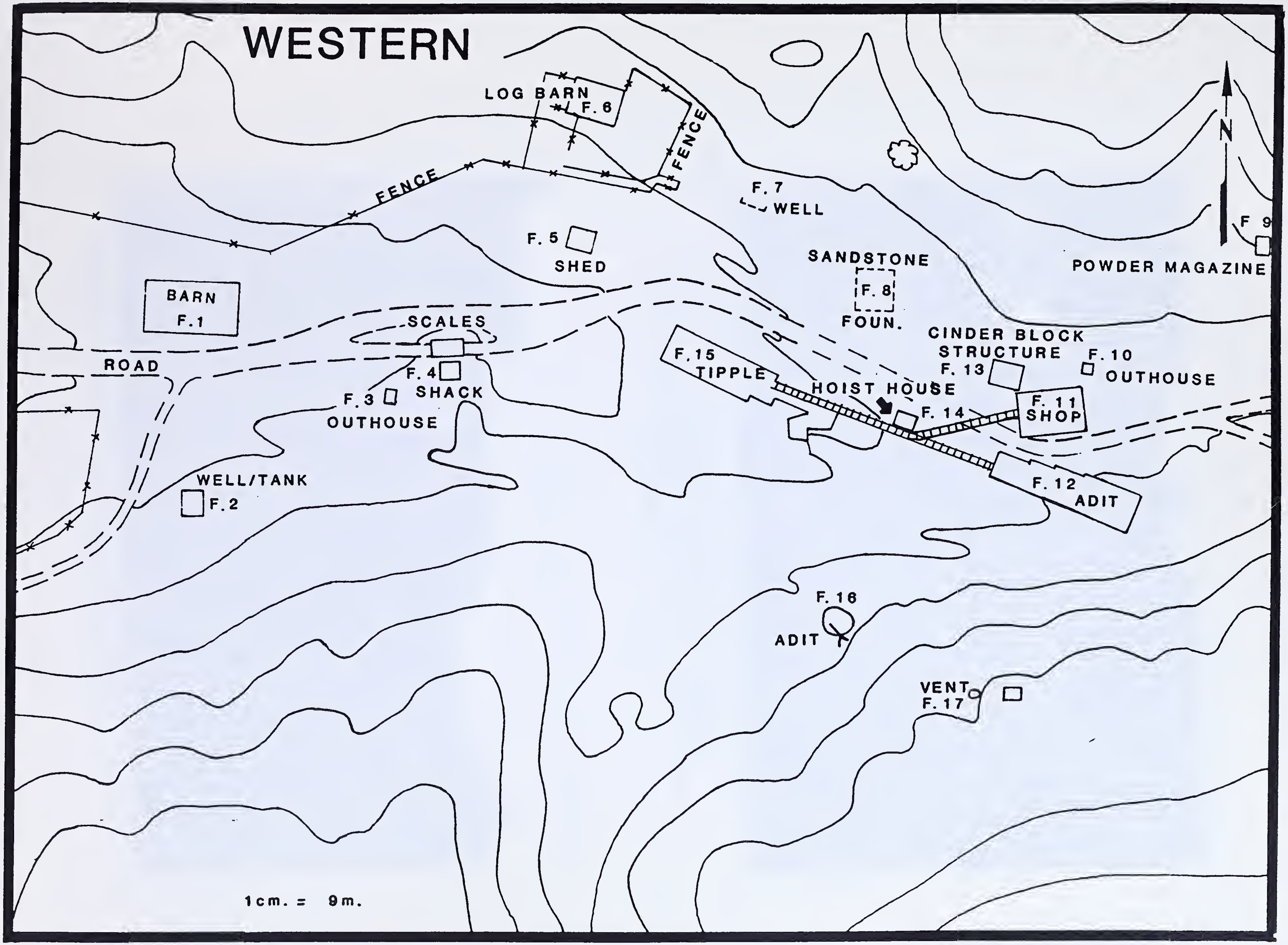

Figure 14. Site map of Western Mine.

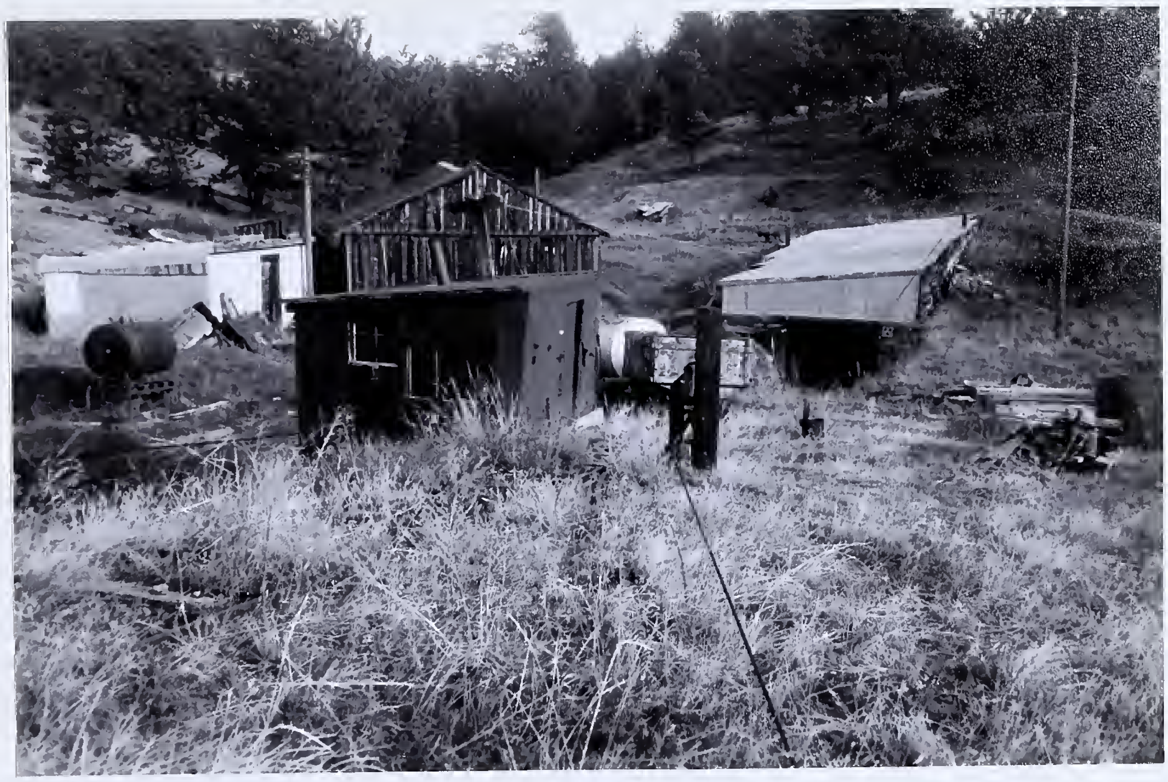

Figure 15. View to the east of the Western Mine entrance area showing cinder block building (left), the shop (center background), mine entrance (right) and hoist house (center foreground).

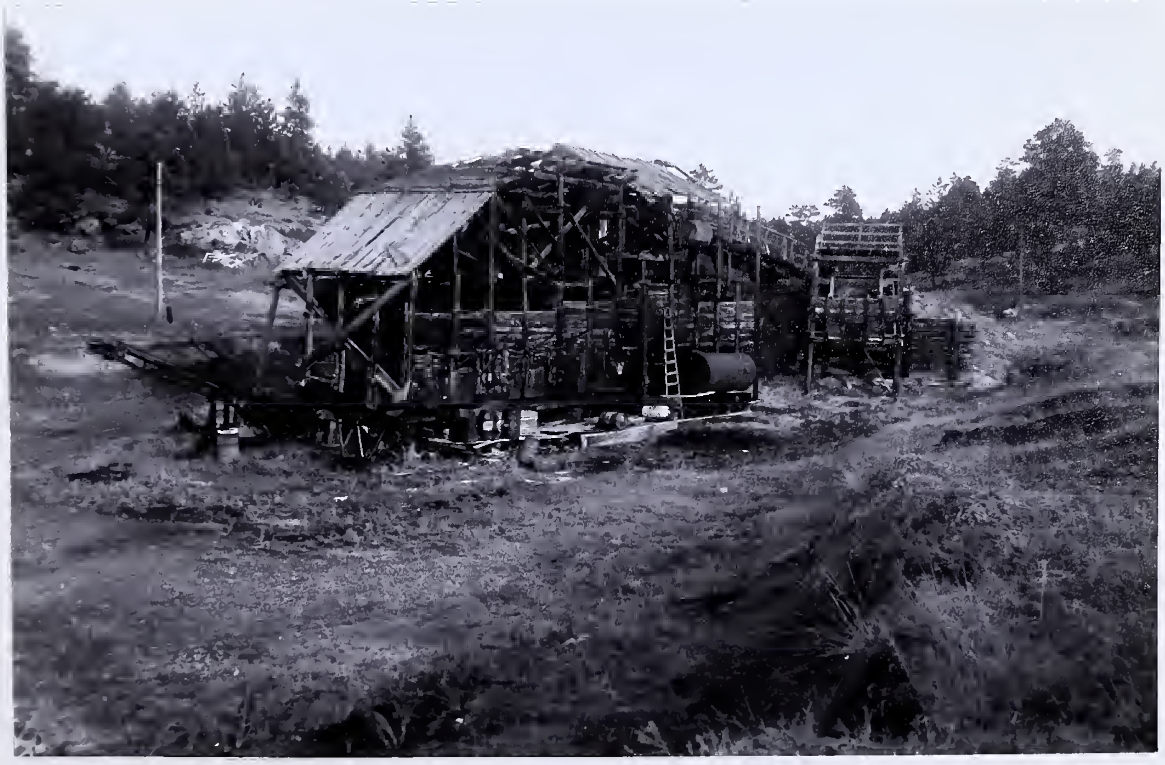

Figure 16. Western Mine tipple (view to east).

Site Identification: 24ML187 - Jeffries Section 4 Mine

Location: NE1/4 NE1/4 NW1/4 of section 4, T7N R26E

Area: 39,000 m^2

Elevation: 1109 m

Description: Little remains of this coal mining site other than large areas of coal waste. The site is located between forested hills which rise to the south, east and west (Figure 17). The area south of the site opens to a high rangeland. A small reservoir is located at the north end of the site.

Structures and Cultural Materials: The only structural remains on the site is an adit portal and a 2.5 x 7 m sandstone foundation (Figure 18). There are a few fragments of the structure's walls which appear to have been constructed of plaster over a chicken wire frame. A few bricks and pieces of scrap metal are scattered around the structure while a number of metal ovens are inside the foundation. At the north part of the site there are a series of coal waste dumps.

Historical Development: The area on which the site is located was originally patented to Josef Matkovich on September 26, 1917 as a homestead entry (#601723). There is no evidence indicating that Matkovich ever mined coal in this area. There was a small mine on the site during this period called the Lazy Joe which was later sold to Johnny Carlson and became the Carlson Mine. Carlson then sold out in 1945 to the Jeffries Coal Mining Company which was owned by G.J. Jeffries. The remnants which currently are found on the site date from the Jeffries operation.

The Jeffries Section 4 Mine was just one of a number of mines operated by the company in the Bull Mountains. In 1916 the company opened its first mine on Horse Thief Creek and operated it for 12 years. When the coal seam was worked out in this area, the company transferred its operations to the M. and M. property just east of Roundup in 1928 (see Jeffries Section 18 Mine of this report). The company also operated the Independent Mine west of Roundup which operated from 1918 into the early 1920s (Cebull 1958; Roundup Record August 30, 1918 and August 6, 1920).

The Jeffries Section 4 Mine started in 1945 and operated until the early 1950s. It was a relatively extensive operation although this is difficult to visualize from the current site condition. In 1947 total production was 47,500 tons with a daily average of 360 tons which was produced by 52 men. The main opening was a drift driven into the coal bed from the outcrop while 1000 feet from the portal a rock slope was driven as a ventilation course. Air was supplied by a 4-1/2 foot fan driven by a 10-horse electric motor. The mine was dry so no pumping was required. The standard room and pillar system was used. A track-mounted cutting machine cut into a 2-inch parting (layer of shale between the seams) and then the lower 20 inch and upper 50 inch seams were mined. The mine faces were shot down with electrically fired Cardox on the night shift. The cars were then hand loaded and hauled by horses or mules to a point where they were hauled to the surface by a 5-ton locomotive powered by storage-battery. Six cars of 3-1/4 ton capacity

each were taken each trip. One of the reasons there is so little remaining on the site from the mining operation is because the surface facilities were never very extensive. The tipple was located five miles north on the railroad and the coal was hauled by four gasoline-powered trucks of 8-1/2 tons capacity from the mine to the tipple where the coal was screened and loaded directly on the railroad. One quarter of the mine's production was consigned to a sugar refinery in northeast Montana while the rest went to coal dealers in Montana and North Dakota for domestic use. In addition, occasional shipments of stoker coal were delivered to the railroad (Travis and Turnbull 1950; Cross 1984; Harmon 1984).

Evaluation: Little remains of this mining site other than coal waste dumps. The only structural remains on the site is the sandstone foundation and it is not known if this was associated with the mining operation. From its appearance, it seems more likely the foundation dates back to an earlier small homestead on the site. The only remains clearly part of the mining operation is the one remaining mine portal and the coal waste dumps. It is unlikely that further work on the site would reveal additional information.

National Register Statement: The physical integrity of the site has been destroyed and the site is less than 50 years old. Therefore, the site is not recommended for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close the mine opening and either remove or reclaim the coal waste areas. It is recommended that the Department's plans be allowed to proceed on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

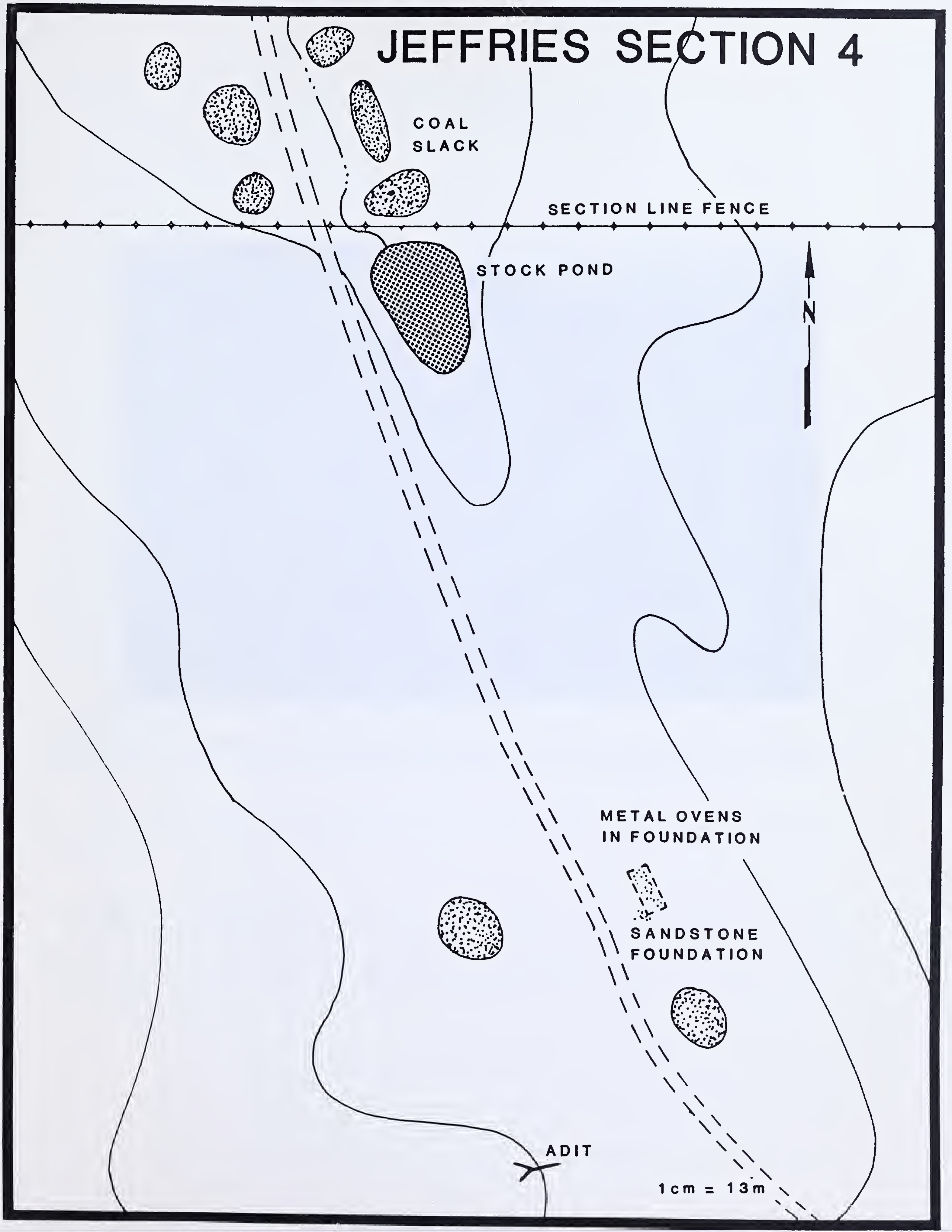

Figure 17. Jeffries Section 4 Mine site map.

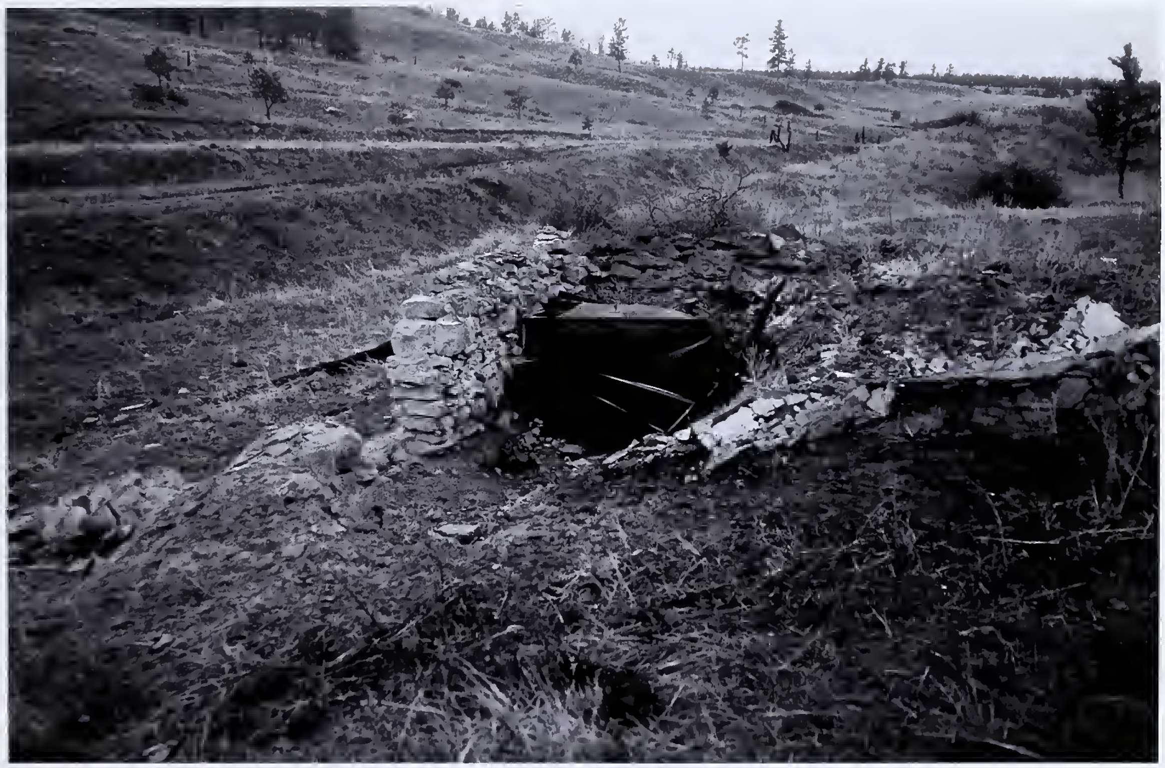

Figure 18. Foundation at the Jeffries Section 18 Mine (view to the north.)

Site Identification: 24ML188 - Carlson Mine

Location: SW1/4 SE1/4 NW1/4 of section 29, T8N R26E

Area: 6300 m^2

Elevation: 1055 m

Description: The site consists of an adit portal, a coal waste dump, a small concrete foundation and a possible mine air vent located near the head of a small east/west trending coulee which runs into East Parrot Creek (Figure 19). The adit portal is located at the base of the sandstone outcrop which runs along the rim of the coulee.

Structures and Cultural Materials: The only structural remains on the site is a small (1.8 x 5 m) concrete foundation which may have once been a mine scales. South of the foundation is a small coal slack pile in front of the mine adit portal which is currently filled with trash (Figure 20). On a knoll to the west of the slack pile is a small opening which may have been a mine vent. A few bits of scrap metal are the only other cultural remains observed on the site.

Historical Development: Little information was available on this site. The land was originally a railroad grant to the Northern Pacific Railroad Company (patent #2) granted on November 18, 1895. The only reference to the site was one informant's recollection that the mine may have been established briefly during the 1930s by Johnny Carlson who also ran a small mine at the site of the Jeffries Section 4 Mine. The mine appears to have been in operation for only a short period and probably furnished coal to local ranchers for domestic use (Carlson 1984).

Evaluation: Little from the mining operation remains on this site other than the adit portal, slack pile and concrete foundation. The foundation appears to have been a mine scales but this is not certain. It is highly unlikely that further work on the site would reveal additional information.

National Register Statement: The physical integrity of the site has been destroyed. The site is not recommended as eligible for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close the mine openings and either remove or reclaim the coal waste dumps. The dump is a source of pollution to East Parrot Creek and the mine openings are an obvious safety hazard. The Department's plans should be allowed to proceed on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

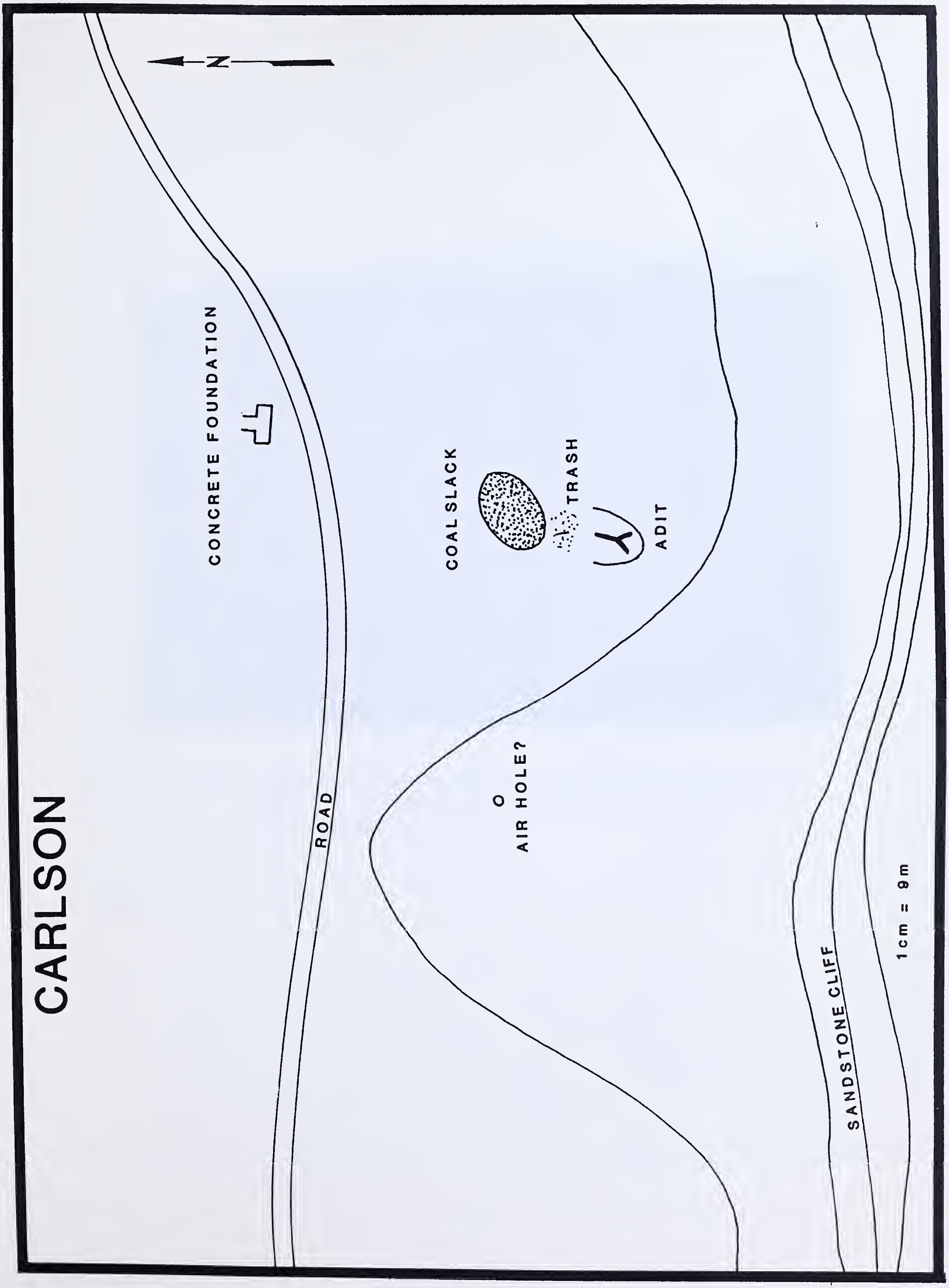

Figure 19. Carlson Mine site map.

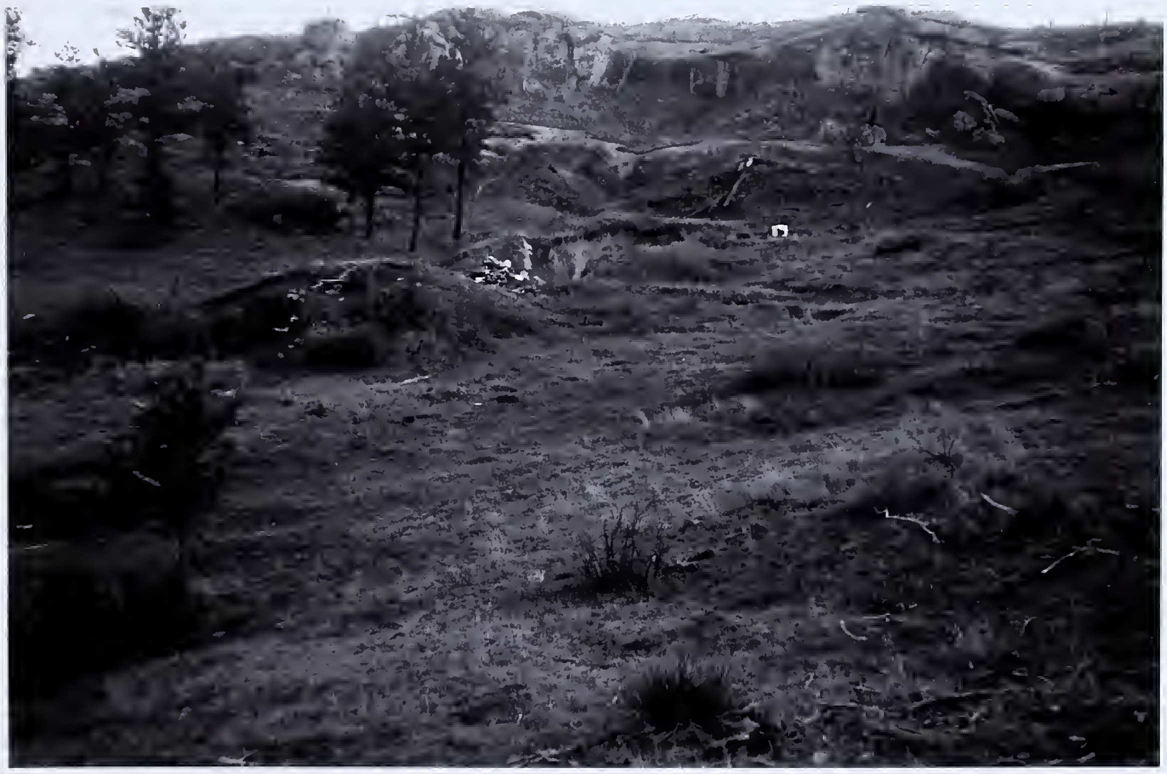

Figure 20. Remains of the Carlson Mine showing the coal slack pile (left center) and adit entrance (center) (view to the south).

Site Identification: 24ML189 - Keene No. 1 Mine

Location: SW1/4 and NW1/4 NE1/4 of section 28, T8N R25E

Area: 33,800 m^2

Elevation: 994 m

Description: The site is one of the Roundup area's earliest major coal mines and is now part of a farm on the north bench of Horse Thief Creek coulee (Figure 21). The entrance to the mine is located up a small side drainage which runs to the north. Slack dumps are found in front of the entrance and the remains of a tipple are located at the east end of the site. The only structures from the mine remaining on the site are the farm house which was originally the mine office and the barn which was the mine's shower/locker building (or "dry").

Structures and Cultural Materials: The adit entrance (feature 1) is located up a small draw at the west side of the site. About 60 m south of the portal are some coal slack dumps and lumber debris which could be the remains of a small tipple (feature 2). East of the mine portal is a small shed/barn which does not appear to be connected with the mining operation. The farm's barn (feature 4 - Figure 22) was originally the mine's "dry" (showers/lockers building). The structure measures 9 x 27 m and 9 x 9 m for the addition at the north end. Adjacent to the barn on the east side is the current farm house which originally served as the mine's office (feature 5 - Figure 23). The house measures 9 x 10 m. East of the house is what appears to be the concrete footings for the mine's main tipple (feature 6). A large metal pipe and coal slack dumps are located to the east of the tipple foundation.

Historic Development: When the Chicago, Milwaukee and St. Paul Railroad entered the Roundup area in 1908, their agent, William A. Keene, was preparing the grade through Roundup. In the process he discovered a workable coal seam on Horse Thief Creek. He acquired a cash entry patent (#327588) for the property on April 22, 1913 although he had started the mine in 1910. The articles of incorporation at the Keene Coal Mining Company were filed in June, 1910 with a capital stock of $250,000. Development work on the mine had already been undertaken with a slope entrance being driven 500 feet into the coal seam. The company had also secured a lease of the right-of-way for a railroad spur to the mine which the railroad promised to build as soon as the mine output reached 100 tons a day (Cebull 1958; Roundup Record June 24, 1910).

In October of 1910 the railroad spur was built and a couple weeks later the Keene shipped its first coal. At this point the mine appeared to be on its way to becoming a major operation. The mine working had a sandstone roof and little timbering was needed and no water problems were encountered (Roundup Record May 14, 1909, October 21 and November 4, 1911). In spite of this promising beginning, the mine went through a checkered career for the next decade. In September, 1911 the Nelson Brothers, who were major coal operators in the Sand Coulee area, acquired controlling interest in the Keene Coal Mining Company. The mine, up to this point, had not been very successful and it was felt that the new management would revive the operation (Roundup Record September 1, 1911). However, in March, 1912 the mine was acquired by the Stillwater Coal Mining Company (Roundup Record March 29,

1912). The new owners were said to be planning to equip the mine with the latest mining machinery but apparently little was done and the holdings were then sold to the Carbon Mine Company of Delaware in April, 1915. A few months later the Keene Coal Mining Company and the Pine Creek Coal Company attempted to merge and following this there was an attempt to sell the property to a W. W. Conklin of St. Paul. During the next three years W. J. Dugan and George J. McCleary attempted to get the mine into steady production but apparently were only able to reopen the mine on an intermittent basis (Roundup Record April 23, June 4, August 27, 1915; November 17, December 8, 1916; December 28, 1917; March 14, November 14, 1919).

In 1920 the mine finally became a steady and profitable enterprise when it was bought by the Bair-Collins Company. The mine was completely reorganized and became an example of innovative mining techniques which made it possible for the Keene to mine its relatively thin seams profitably. The new company first changed the mine from a slope to a shaft and deliberately designed the operation for a maximum daily output of 600 tons which allowed them to keep down the investment in equipment (Figure 24). The workings were driven at angles of 30° from the main entries which permitted easier grades into the rooms (see Figure 25 of the mine workings in 1922). The coal cars were also redesigned to work in the thin seams (Figure 26). Not only was the car much lighter (1,200 pounds) but it was also lower, so it fit in the restricted working places, making it easier for the loaders to load large lumps. Steel ties were used since they further reduced the height of the car and tracks. Other inovations in the mine included an automatic sump pump system; a new type shaker-screen; a simplified maim hoist operation; and the use of a combination trolley-and-storage-battery locomotive to haul coal cars from the workings. The mine employed an average of 65 men and was a steady producer until 1930 when the mine was completely worked out and was forced to close (Schloss 1922; Cebull 1958).

Evaluation: Although one of the earliest mines in the Roundup area and one that eventually became a major producer, little remains on the site from the mining operation. The two structures from the mine (features 4 and 5) are in good contition but have been altered to a point where their original functions as the mine "dry" and office are no longer discernible. Only traces remain of other mine facilities, such as the tipple and mine entrance.

National Register Statement: Little remains on the site from the mining operation even though the Keene Mine was one of the larger coal mines in the area. Only two structures remain from the mining operation and both have been modified to a degree where their original function is no longer discernible. Since the basic site integrity no longer exists the site is not recommended as eligible for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close any mine openings and either remove or reclaim the coal waste areas. The coal waste is a source of pollution to Horsethief Creek and therefore the Department's plans should be allowed to proceed on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

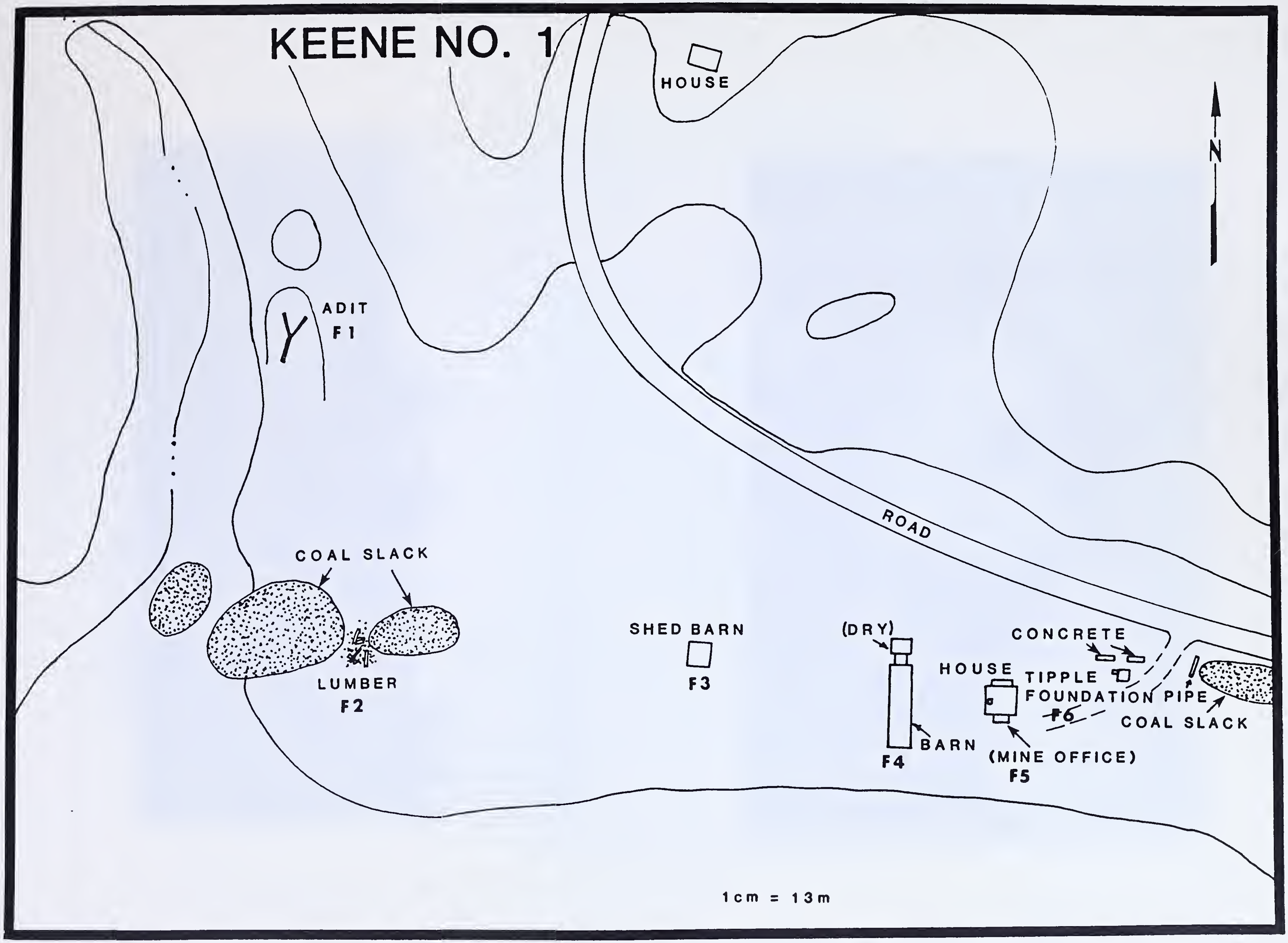

Figure 21. Keene No. 1 Mine site map.

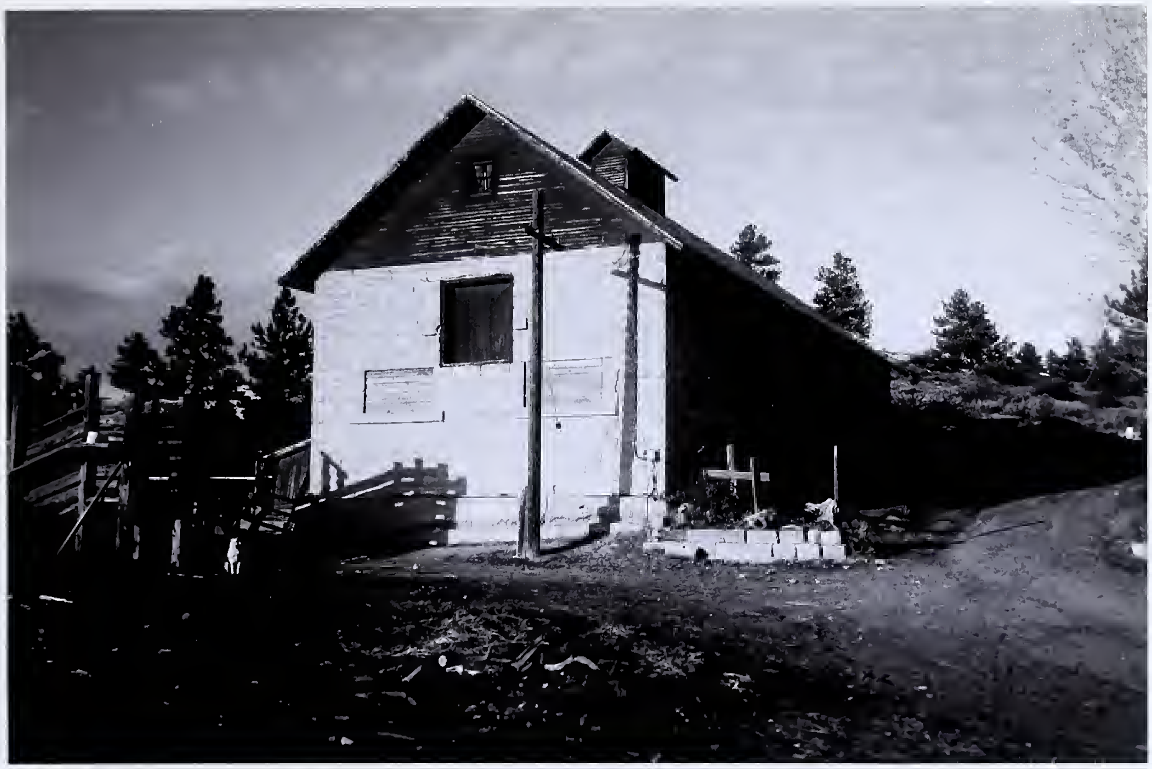

Figure 22. Keene No. 1 "dry" (view to northeast).

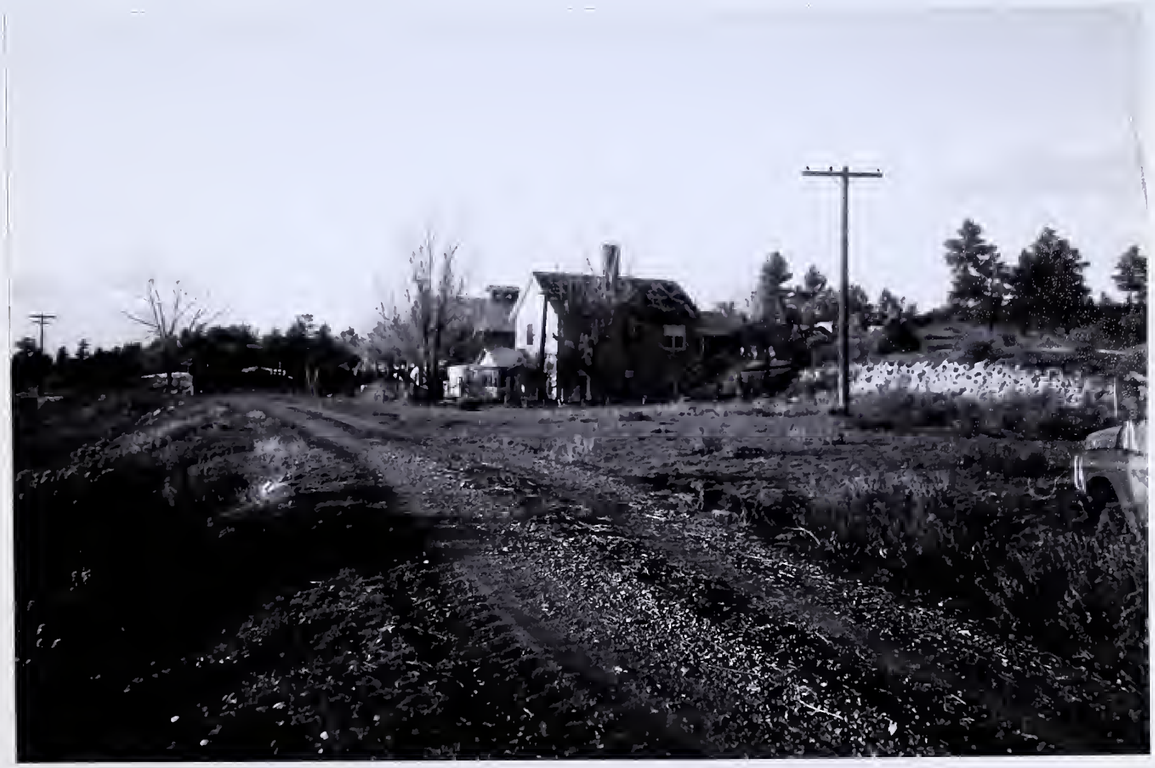

Figure 23. Keene No. 1 office (view to northwest).

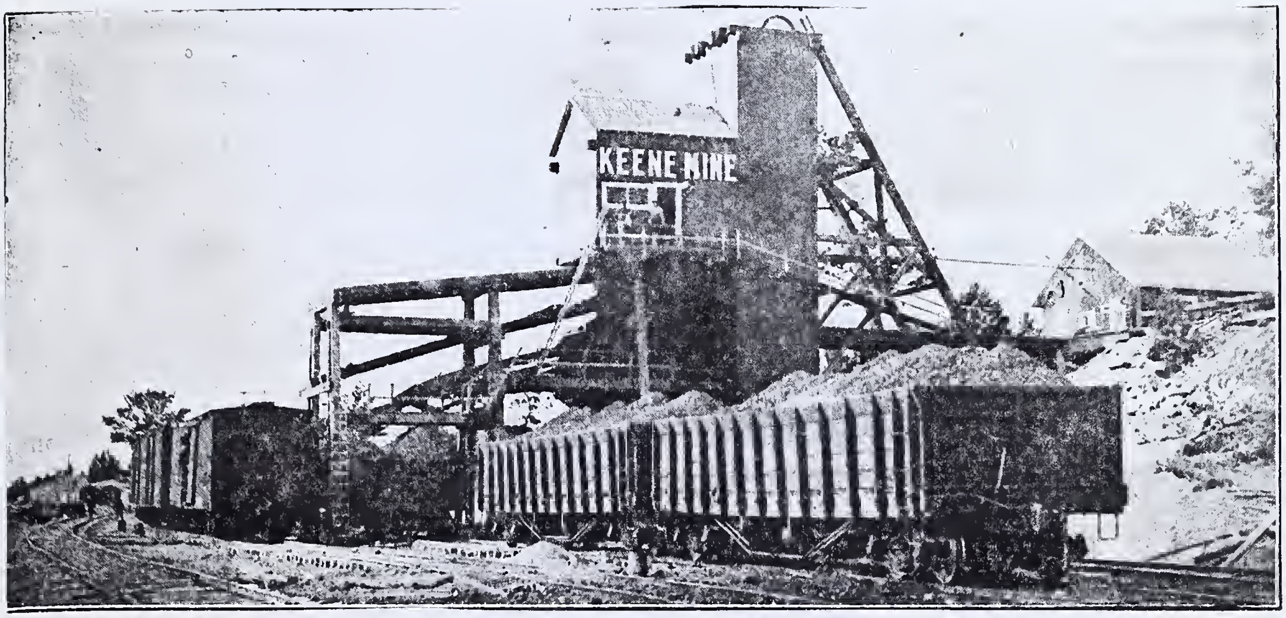

Figure 24. Keene No. 1 ca. 1922 (from Coal Age, August 24, 1922).

1922 KEENE WORKINGS

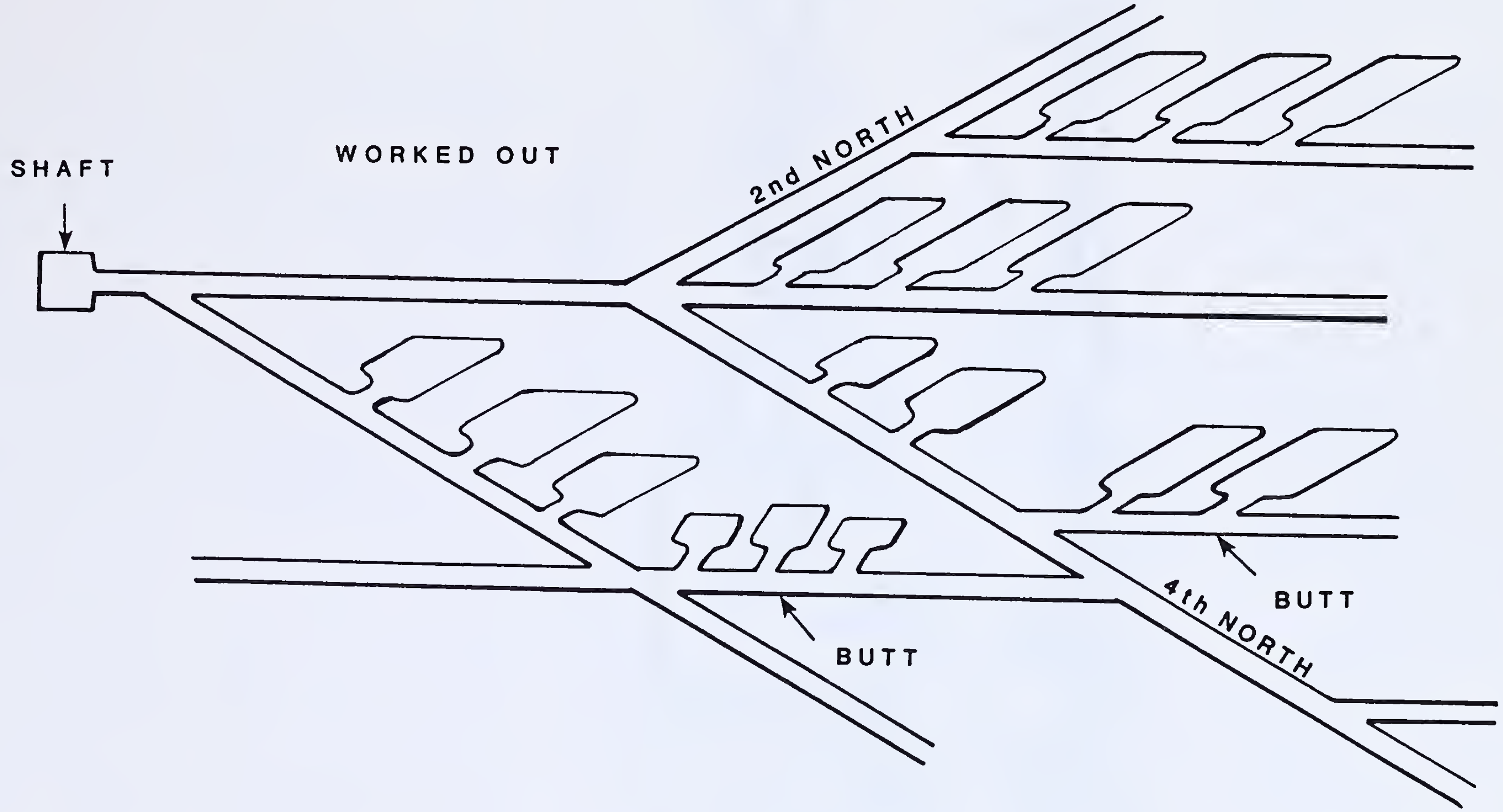

Figure 25. Keene workings in 1922.

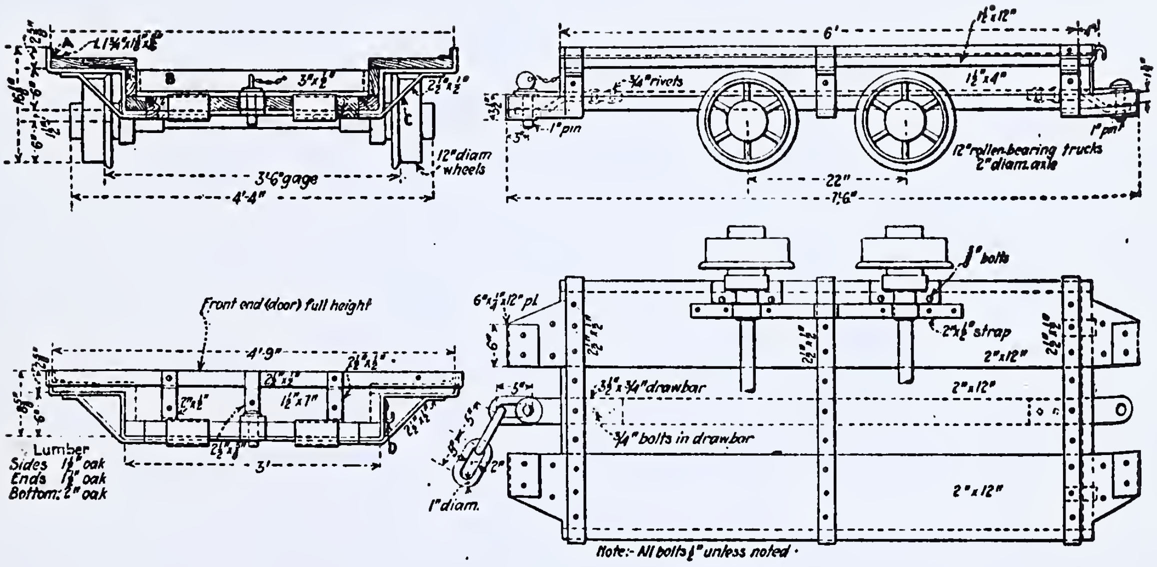

Figure 26. Keene mine cars.

Site Identification: 24ML190 - Square Deal Mine

Location: SE1/4 NE1/4 SE1/4 of section 17, T8N R25E

Area: 49,000 m^2

Elevation: 1030 m

Description: The site consists of a recently abandoned coal mine located in the hilly, wooded terrain of the western edge of the Bull Mountains (Figure 27). The site is situated at the base of a west-facing line of hills on the southeast side of the county road which runs by the north edge of the site. A small intermittent stream runs parallel to the road and flows southwest into Horsethief Creek.

Structures and Cultural Materials: Most of the remaining structures on the site are of relatively recent construction since the mine was in operation into the 1970s. The scales foundation (feature 1) is located at the entrance to the mine. A large safe is still on the foundation and an outhouse (feature 2) and a small shed (feature 3) are adjacent to the foundation. The adit entrance (feature 4 - Figure 28) is located at the base of the small hill on the north side of the site. South of the entrance is a coal slack dump and the foundation footings for the tipple (feature 5) which has been removed. Some of the tipple footings were made of oil drums filled with concrete. Feature 6 is a railroad boxcar (2 x 10 m) which was used as a mine locomotive shed. The remains of the mine's electric locomotive are still in the shed. Feature 7 is a 12 x 15 m general shop building constructed of cinder blocks, bricks and sheet metal. Near the shop is a small wood shed measuring 4 x 5 m. Feature 9 is a 3 x 4 m foundation. At the far east end of the site is the powder magazine at the base of the sandstone outcrop. Feature 11 is another 3 x 4 m foundation and feature 12 is another small (3 x 4 m) wood shed. Next to the shed is a squirrel cage-type mine ventilation fan. Feature 14 is a 3 x 4 m wood shed. The site area is also littered with miscellaneous debris and coal waste dumps, including one adjacent to the county road 250 m north of the mine area.

Historic Development: The land on which the Square Deal Mine is located was first patented to the Northern Pacific Railroad Company on November 18, 1895, (patent #2). The first mining on the property was not begun until the early 1920s when the first development was undertaken by Sam Moss who held a lease on the property. Around 1932 the mine was taken over by Harley Klinger. A few years later he sold out to [first name unknown] Berkley. Then around 1945 the mine was bought by the Rackie brothers (Joel, Steve and Tony) who were incorporated as the Northern Coal Company. The mine's last owner was Virgil Cross who bought it in 1958 and operated it until it closed in 1970. Cross then opened a small strip mine a short distance west of the mine from 1971 to 1972 (Cross 1984; Harmon 1984).

Most of the mine's development occurred during the period that Cross owned it and the remains currently on the site date from this period during the 1960s. The mine operated on a seasonal basis for generally about four months out of the year. In 1947 it produced 1600 tons of coal and employed four men. A shortwall cutting machine was used to mine the 42 inch thick bottom bench of coal. The mine workings were reached by a slope entry driven into the rock outcrop (Travis and Turnbull 1950; Cross 1984).

Evaluation: The site is in poor to fair condition. The main mine structure, the tipple, has been destroyed and a number of other structures have been removed (features 1, 9 and 11). The remaining structures are intact but are of relatively recent origin and of no significant historic or technological interest.

National Register Statement: The site is not recommended for listing on the National Register of Historic Places. The most significant mine-related structure, the tipple, has been removed while the remaining structures are of recent origin, dating from the 1960s, and are of no particular historical or technological interest.

Management Recommendations: The Department of State Lands plans to close the mine openings, either remove or reclaim coal waste areas and remove structures determined to be hazardous. Mine openings are always a safety hazard, while the coal waste areas are a source of pollution to the local surface water. The Department's plans should be allowed to proceed on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

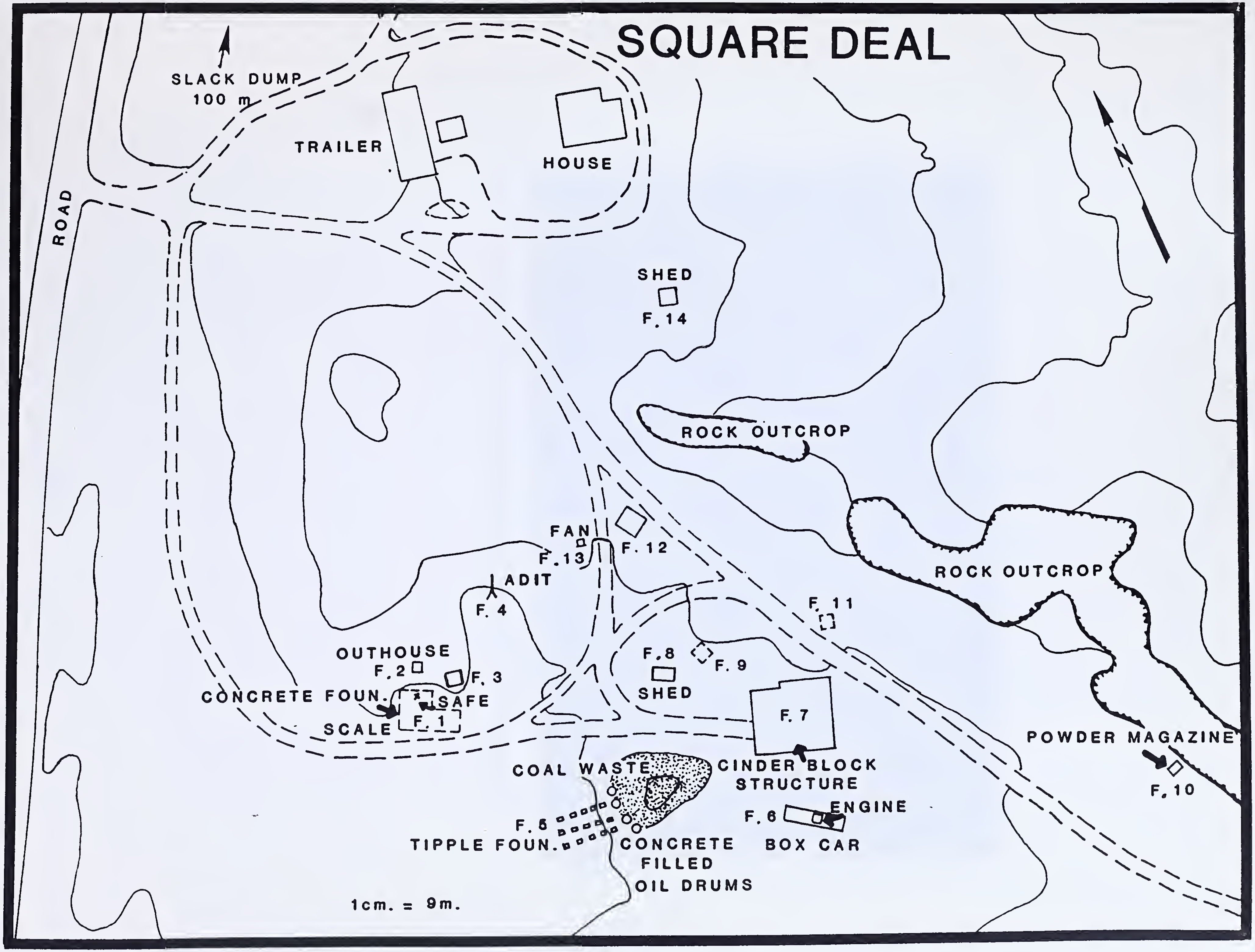

Figure 27. Square Deal site map.

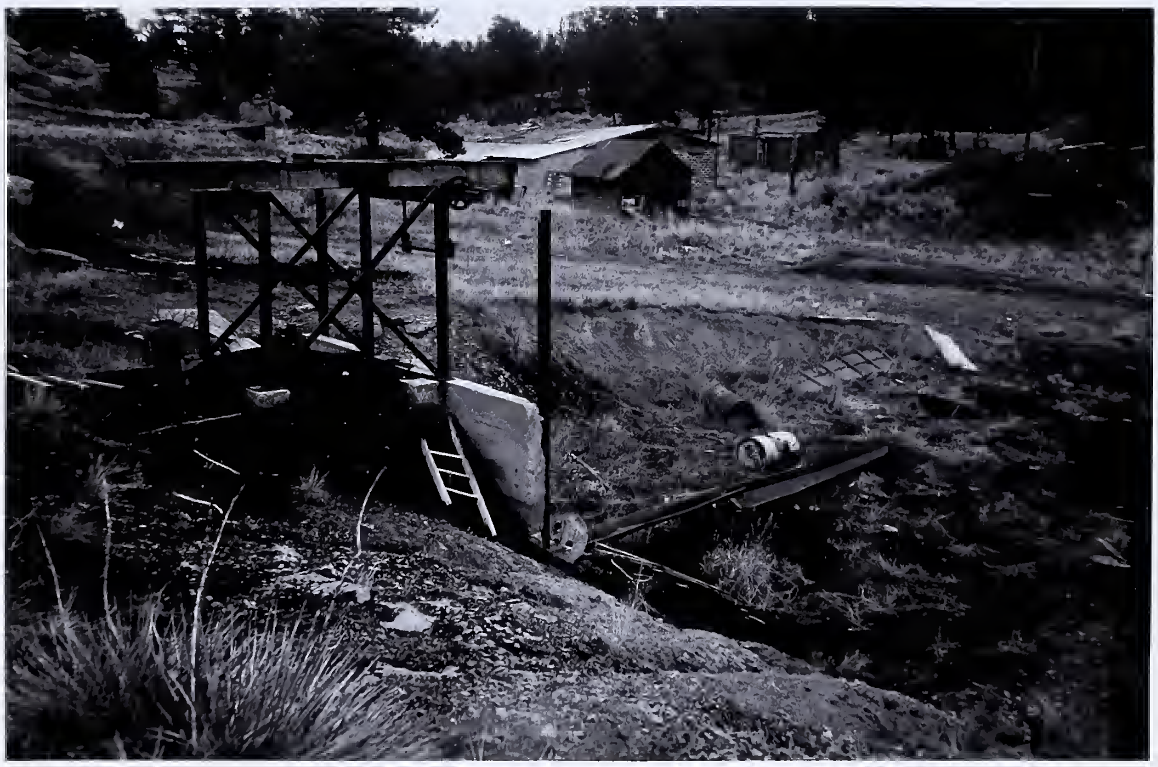

Figure 28. Square Deal adit entrance (view to the southeast).

Site Identification: 24ML191 - Nies Mine

Location: SE1/4 SE1/4 SE1/4 of section 17, T8N R25E

Area: 20,000 m^2

Elevation: 1030 m

Description: The site consists of a recently abandoned small coal mine which is still intact. The mine is located at the base of the northwest-facing line of hills along the south side of the county road which runs through the area (Figure 29). An intermittent stream runs adjacent to the north side of the site and flows to the southwest into Horsethief Creek. The hills around the site are heavily forested.

Structures and Cultural Materials: Due to the fact that the mine was in operation until fairly recently, much of the mine's facilities remain intact and in relatively good condition. Feature 1 is a 3 x 4 m concrete foundation for an unknown structure. The most imposing structure on the site is the tipple (feature 2 - Figure 30). The tipple is built of wood and galvanized metal with a wood tressle running from the east end to the mine adit portal. The total distance spanned by the structure is 80 m, while the width averages about 5 m. The irregular structure is angled in the middle with a section built at right angles from the southwest side. Some of the machinery remains in the tipple and a large compressor (feature 3) is located at the northwest section of the tipple. Near the compressor is a tank (feature 4) and a galvanized metal machine shed (feature 5) which measures 7 x 11 m. North of the shed is a concrete slab (feature 6) and the mine scales foundation and shed (features 7 and 8). A tank (feature 9) and small wood shed (feature 10) are located at the north end of the site. A 3 x 5 m wood shed (feature 11) is north of the tipple and a 3 x 20 m shed is adjacent to the north side of the tressle. The mine's adit portal (feature 13) is at the end of the tressle. An air shaft (feature 14) is a few meters southwest of the adit.

Historic Development: The land on which the site is located was a railroad section granted to the Northern Pacific Railroad on November 18, 1895 (patent #2). The mining operation, however, came much later. The mine was first opened by Fred and Gus Nies in 1947. Later it was run by Fred Nies' son, William Nies, until it closed in 1971.

The mine portal was a slope driven from the outcrop into the seam. In 1947 total production was about 4000 tons with a daily average of 30 tons mined by four to six men. The operation was a typical small-scale mine which sold coal on the local market for domestic use (Cross 1984; Travis and Turnbull 1950).

Evaluation: The mine is in relatively good condition. The tipple and other mine buildings remain intact due to the fact that the mine was in operation until a fairly recent date. The structures are deteriorating, however, due to weathering and abandonment. The mine does not exhibit any particular technological innovations, but the overall site remains as a good example of the small-scale, post-World War II mining operation.

National Register Statement: Although the site integrity is good, the Nies Mine is less than 50 years old and thus does not meet the criteria for listing on the National Register of Historic Places. The mine does not appear to have been of sufficient economic significance to the area to be an exception to the 50-year guideline. The site, therefore, is not recommended for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close any mine openings, either remove or reclaim the coal waste areas and remove any structures considered to be hazardous. The mine openings are an obvious danger and the coal waste dumps are a source of pollution to the drainage which forms part of Horsethief Creek. If any of the structures are considered hazardous and are to be removed, it is recommended that additional photographic documentation be made of the structures. The tipple, in particular, is one of the few surviving examples in this area of the small mining operation's surface facilities and additional documentation of it would be warranted. If the surface structures are not to be impacted, no further work on the site is recommended, since it has been recorded, mapped and photographed.

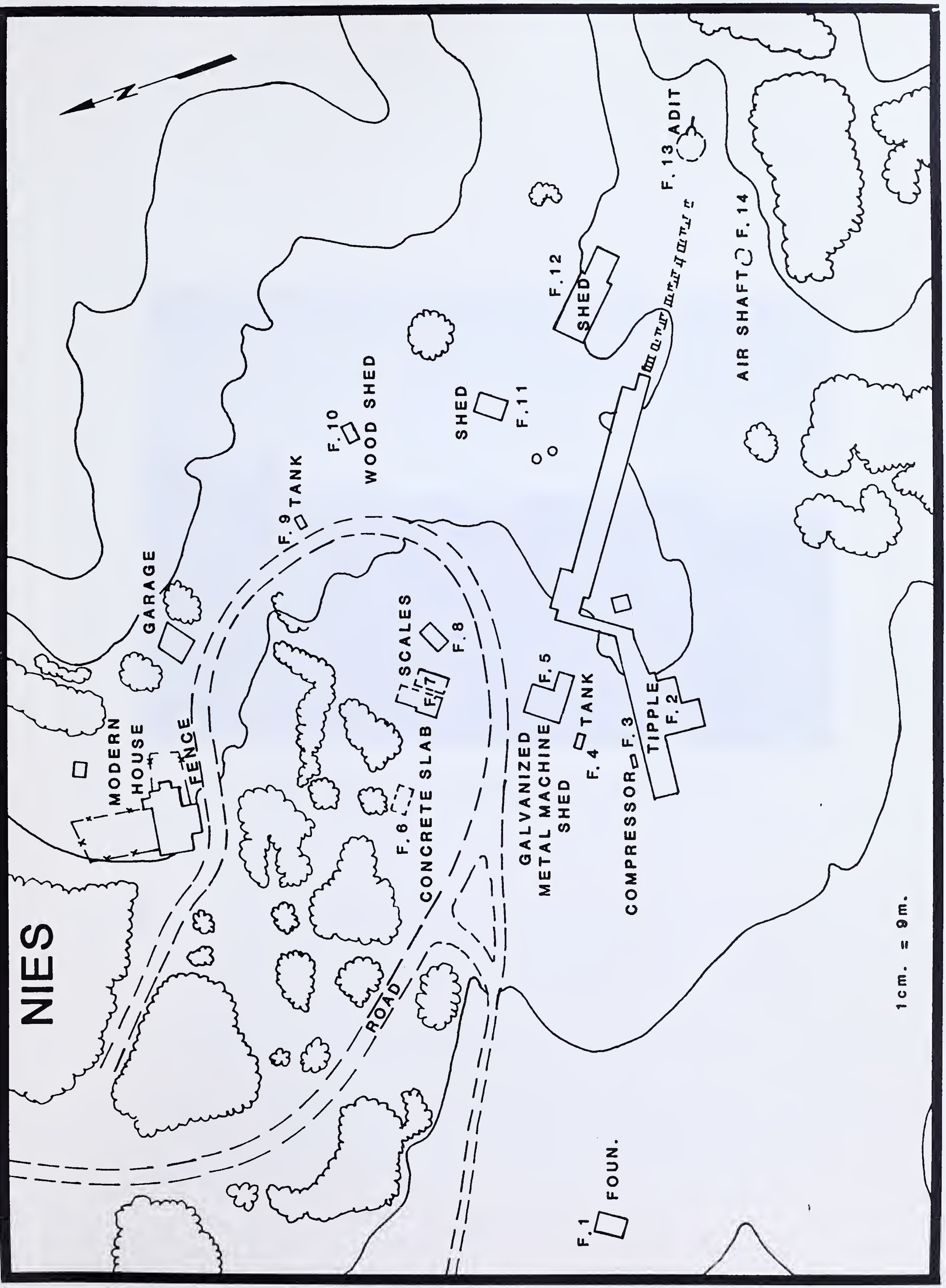

Figure 29. Nies site map.

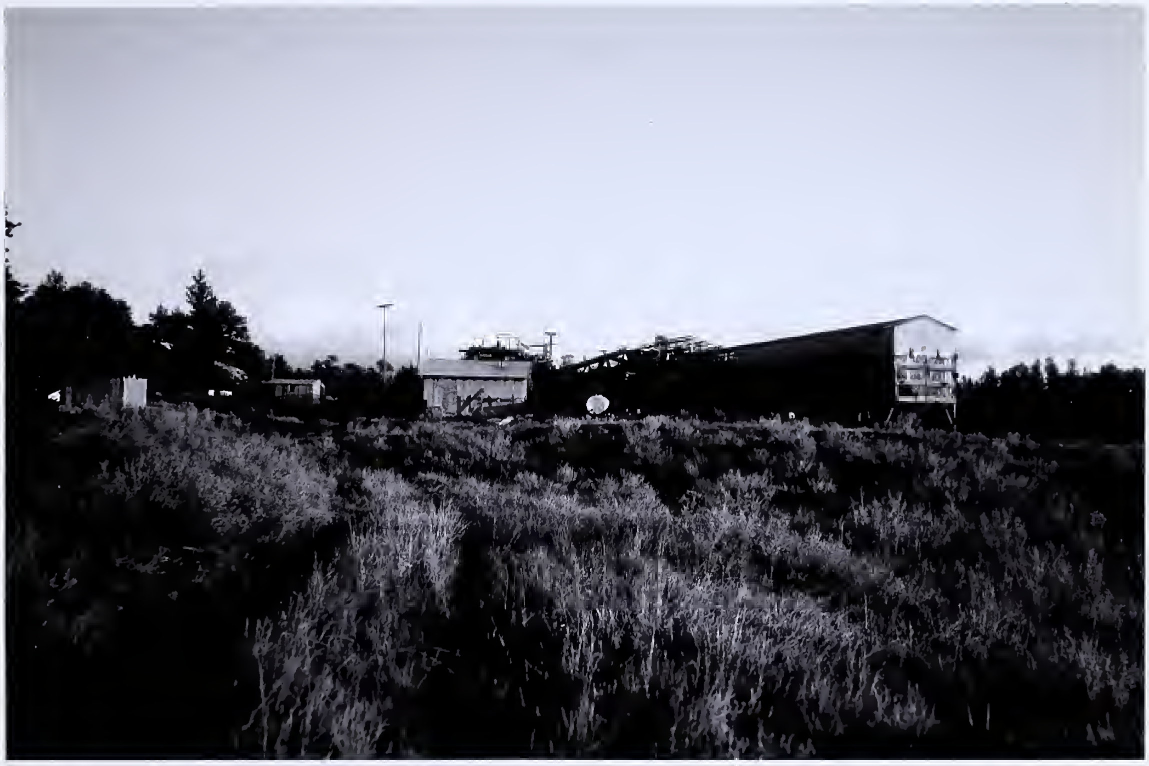

Figure 30. Nies tipple complex (view to the east).

Site Identification: 24ML192 - Nelson Brothers Mine

Location: SW1/4 SE1/4 section 17 and NW1/4 NE1/4 of section 20, T8N R25E

Area: 7500 m^2

Elevation: 1036 m

Description: The site consists of a small coal mining operation located within the sandstone outcrops of the forested hills which run along the south side of the county road through the area (Figure 31). On the north side of the road there is a small intermittent stream which flows into Horse Thief Creek. Two adits have been driven into the coal seam at the outcrop. Other than the adits and coal waste dumps, little structural evidence remains on the site.

Structures and Cultural Materials: The site consists of two adit entrances 250 m apart although both are at about the same level of the sandstone outcrop. There are no structural remains at the southwest adit (Figure 32). A coal waste dump is in front of the adit entrance. The remains of a wood tipple are found near the northeast adit. All that is left is the lumber debris from the tipple which originally was about 20 m long. A small sandstone foundation is built into the sandstone outcrop a few meters in front of the adit entrance. Coal waste dumps and the faint remains of a road down the hillside are the only other remains on the site.

Historical Development: The site area was originally a railroad grant given to the Northern Pacific Railroad on November 18, 1895 (patent #2). The two small mine adits on the site were not developed until the 1920s. Although the adits are in close proximity to the Nies Mine located a few hundred meters to the northeast, there apparently was no connection between the two sites. The northeast adit was little more than a prospect hole driven by Fred Nelson and his brother [first name unknown] (Cross 1984).

The adit at the southwest section of the site appears to have been a later development of a small prospect in 1950. The mine produced about 10 tons a day which was dug by two men. The total amount of coal produced by the mine was about 400 tons. It never went into production (Travis and Turnbull 1950).

Evaluation: Very little remains on the site from the original mine. There are no significant structural remains from the small-scale operation which probably had very little in the way of surface facilities when it was in operation. The adits were apparently prospects and were never put into production. It is unlikely that further work on the site would produce any additional information.

National Register Statement: The site is of relatively recent origin and thus does not meet the criteria for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close the mine openings and either remove or reclaim the coal waste dumps. Both are obvious safety and health hazards and the Department's plans should be allowed to proceed on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

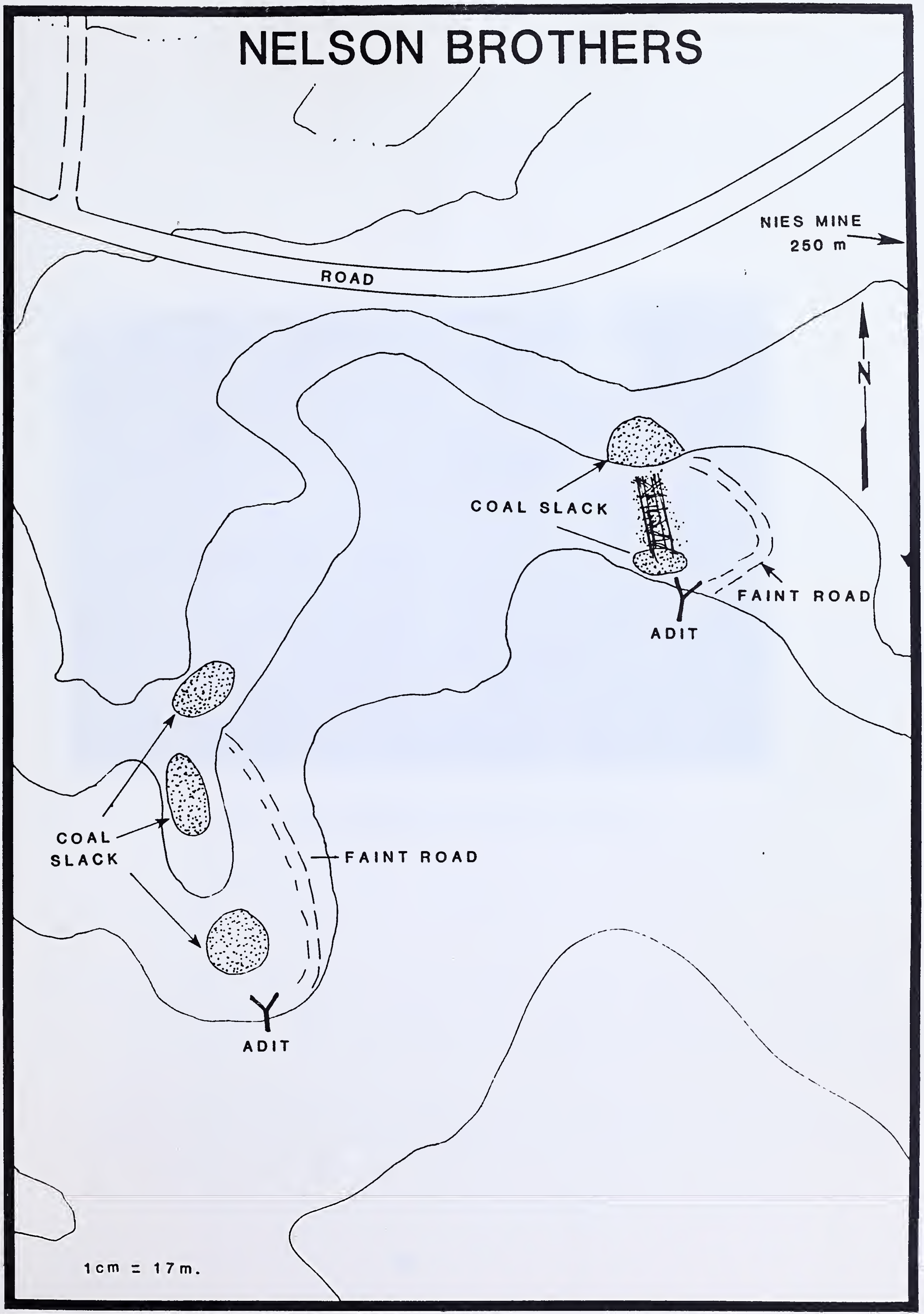

Figure 31. Nelson Brothers site map.

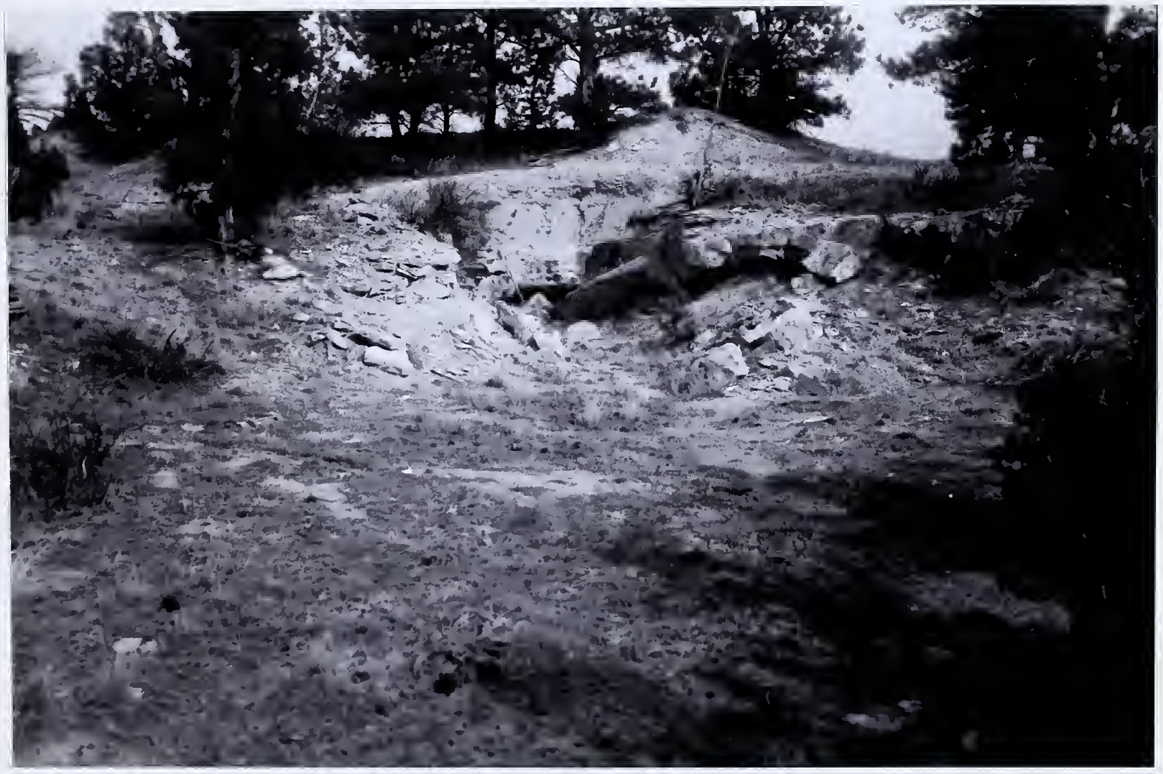

Figure 32. Adit portal at the Nelson Brothers (view to south).

Site Identification: 24ML193 - Johnson Mine (Original)

Location: SW1/4 NW1/4 NW1/4 section 15 and SE1/4 SW1/4 SE1/4 section 9 and SW1/4 SE1/4 SE1/4 section 9, T8N R25E

Area: 150,000 m^2

Elevation: 1067 m

Description: The site consists of three separate surface components of the same mining operation (Figure 33). The site area runs in a line through an open area surrounded by wooded hills. Little remains of the mining operation except for adit openings and coal waste.

Structures and Cultural Materials: At the original Johnson Mine entrance at the southeast corner of the site, all that remains is a small adit opening in a sandstone outcrop. The second adit opening is located under the county road. No other remains are at this location other than coal waste. The third adit also has coal waste in front of it (Figure 34). No standing structures remain at this location, although traces of a tipple can be observed on the coal waste dump in front of the adit. Also at this location is a 3 x 6 m concrete foundation with a 2 x 5 m wood foundation adjacent to it (Figure 34). The foundations appear to be the remains of the mine's scales.

Historic Development: The Johnson Mine was originally begun by Fred and Henry Tressel around 1920 on land that had been a railroad grant to the Northern Pacific Railroad on November 18, 1895. Carl H. Johnson then took over the property in 1921 and started a mine at the original adit. Later adits were driven to the northwest into the same coal seam. Johnson operated the mine until 1932 and then he associated with Victor Forstrom as the Johnson Coal Company. Johnson died in August, 1947 and the operation was taken over by Forstrom and Johnson's son, Glen Johnson. At this time the mine employed an average of five men who produced about 4,000 tons of coal a year. The mine virtually shut down by the early 1950s. Johnson tried to grow mushrooms in the mine for a while and then transfered his operation to the Western Mine where he later also tried to raise mushrooms (see Western Mine section of this report). The Johnson Coal Company then moved its operations to the Johnson No. 2 Mine site where it operated for the next ten years under Forstrom (see Johnson No. 2 Mine section of this report) Travis and Turnbull 1950; Roundup Record-Tribune August 14, 1947; Cross 1984).

Evaluation: The Johnson Mine was one of the most long-lasting small-scale coal mines in the Roundup area. It was one of the last mines to close, having operated almost continuously for 50 years. However, almost nothing remains of the mine's surface facilities. Only coal waste and adit entrances mark the site of the mining operation. It is unlikely that any further work on the site would reveal additional information.

National Register Statement: The physical integrity of the site has been virtually destroyed. The site is not recommended for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close any mine openings and either remove or reclaim the coal waste areas. The mine openings are an obvious safety hazard while the coal waste is a source of pollution to the upper tributaries of Horse Thief Creek. The Department's plans should be allowed to proceed on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

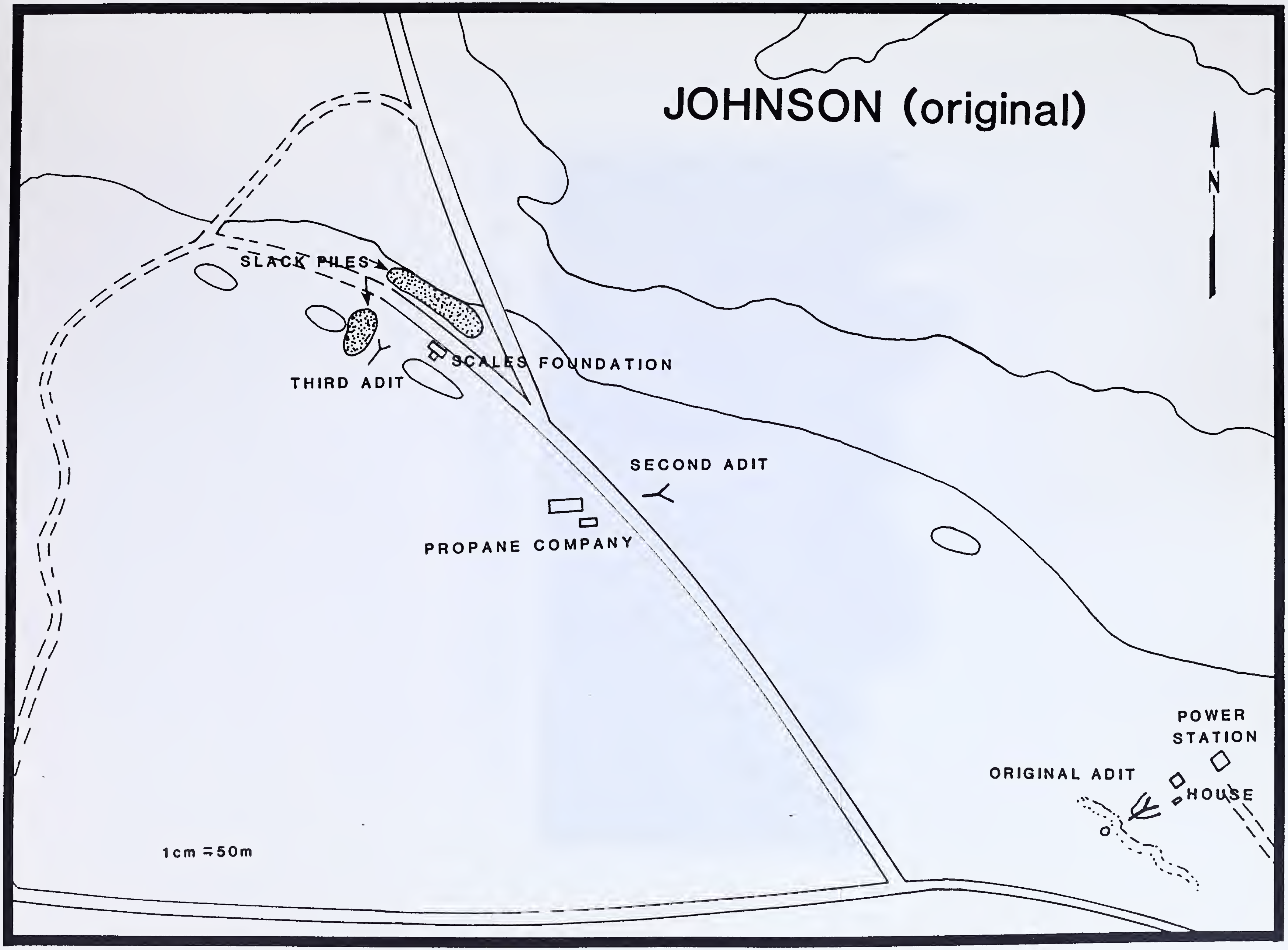

Figure 33. Johnson (original) site map.

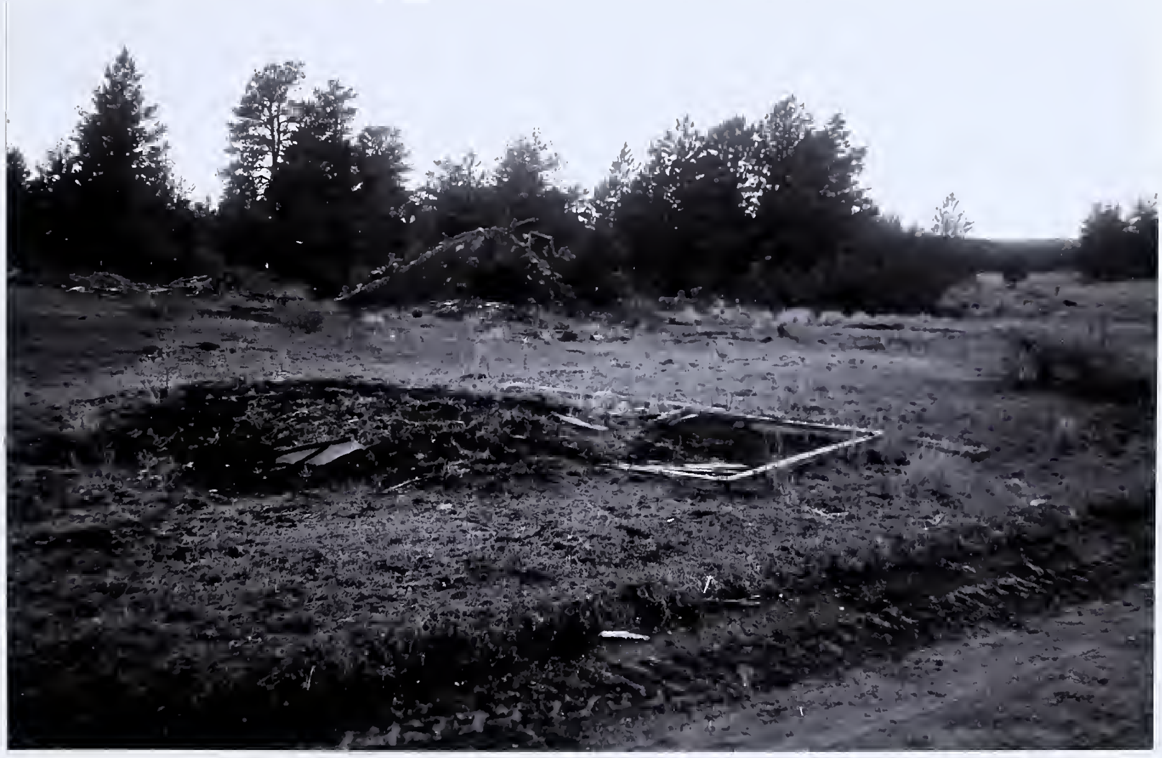

Figure 34. Johnson Mine adit, slack pile with tipple ruins and scales foundation (view to southwest).

Site Identification: 24ML194 - Johnson No. 2 Mine

Location: N1/2 section 16, T8N R25E

Area: 40,000 m^2

Elevation: 1036 m

Description: The site consists of the remnants of a coal mine located on the upper drainage of a tributary of Horse Thief Creek (Figure 35). The immediate site area is open, rolling grasslands with stands of pine trees. The dominant feature on the site is a large coal waste dump with an adit opening near by.

Structures and Cultural Materials: At the west end of the site area is a 3 x 5 m log cabin (feature 1). The structure is seven logs high and one had a low peaked roof which has collapsed. East of the cabin are the small cabin and adjacent dugout, each measuring 2 x 3 m (features 2 and 3). South of the cabins are large coal waste areas with concrete blocks (feature 4) scattered over them. On the east side of the site area is a large 15 x 20 m concrete slab foundation (feature 5) which is located in front of a coal waste dump with the mine adit opening (feature 6 - Figure 36) on the opposite side.

Historical Development: The Johnson No. 2 Mine was a relatively late mining development in this area. The mine was established on the state school section land by the Johnson Coal Company (see Johnson Original Mine section of this report) under owner Victor Forstrom following the death of Carl Johnson in 1947. The mine had limited success during the next decade. In 1949 the tipple burned down but was rebuilt and production continued off and on through the 1950s. On January 29, 1959 a fire again destroyed the tipple and also the machine shop. At this time the mine was being operated under a lease by the Square Deal Coal Company and then was bought outright by Virgil Cross. The tipple and machine shop were rebuilt and the mine resumed production but then closed during the early 1960s. The mine was, at best, only a small operation with limited reserves of minable coal. The main opening was a drift which was driven in the coal bed from the outcrop. On the average, a couple of men were employed and about 1000 tons of coal a year were mined (Travis and Turnbull 1950; Roundup Record-Tribune January 29 and October 8, 1959; Cross 1984).

Evaluation; The Johnson No. 2 Mine was only a minor operation which ran for a relatively brief period. All that remains of the mine is the entrance, coal waste dumps and a concrete foundation. The log cabins and dugout on the site do not appear to have been associated with the mining operation. It is unlikely that further work on the site would reveal any additional information.

National Register Statement: The physical integrity of the site has been destroyed and the site is considerably less than 50 years old. It is not, therefore, recommended as eligible for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close any mine openings and either remove or reclaim the coal waste areas. The mine opening is an obvious safety hazard and the coal waste is a source of pollution to the local surface water. The Department's plans should be allowed to proceed on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

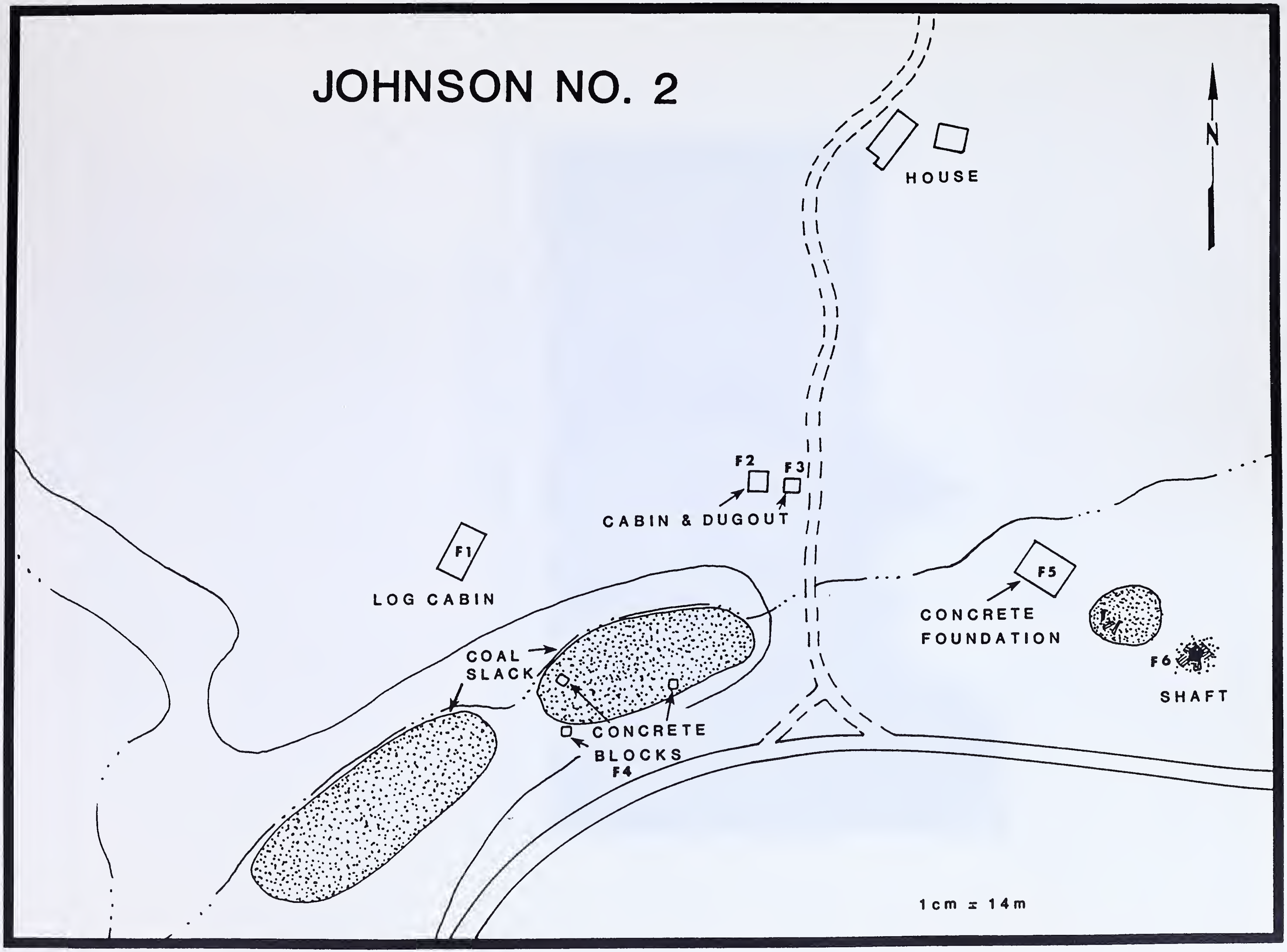

Figure 35. Johnson #2 site map.

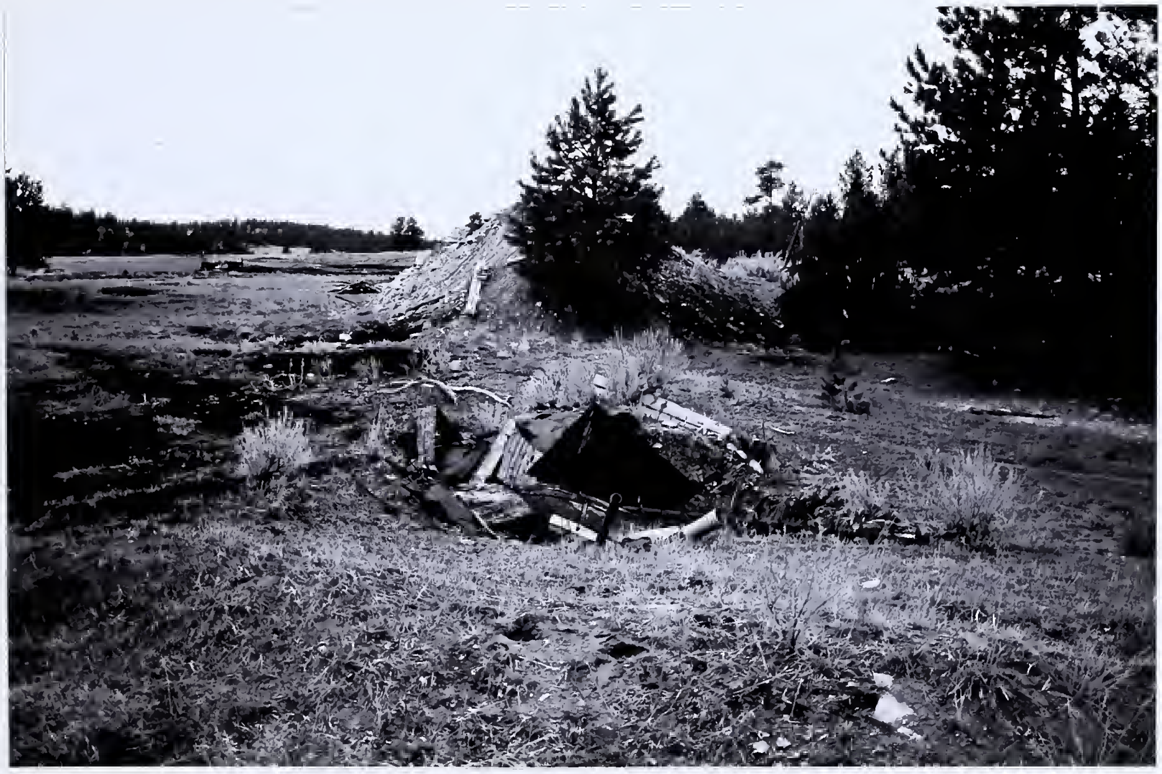

Figure 36. Johnson No. 2 Mine opening (foreground) and slack pile (view to the northwest).

Site Identification: 24ML165 - The Commercial Mine*

Location: N1/2 NW1/4 Section 23 and SW1/4 SW1/4 SW1/4 Section 14, T8N R25E

Area: 67,000 m^2

Elevation: 981 m

Description: The Commercial Mine is located about a mile southwest of the town of Roundup immediately north of U. S. Highway 12 (Figure 37). All that remains that would identify the site as a mining operation are mine tailings located just east of the county road which heads northwest from the highway. Most of the area is disturbed with only a thin cover of range grasses over the tailings piles. Much of the mine site is currently used by a lumber yard operation. The nearest water is a small intermittent creek which runs through the site. The Musselshell River is a half mile south and the slope from the mine entrance originally ran under the river to the coal bed over three miles to the southeast.

Structures and Cultural Materials: Almost nothing remains of this mine which was once one of the largest coal producers in the Roundup area. The tailings on the north side of the site are the most obvious remains. Two structures from the mine operation are located to the south of the tailings (Figure 38). The two structures measure 8 x 22 m and are constructed of cut lumber and tin siding resting on concrete block foundations. The original use for the buildings is unknown although they most likely were used for maintenance or storage. The structures are currently used as warehouses. Nothing remains of the original tipple (Figure 39) which was torn down in 1927 nor of the replacement tipple which burned down around 1957. No trace of the original mine portal remains on the site area (Lynch 1982).

Historical Development: The Roundup Coal Mining Company opened its No. 3 (or "Commercial Mine") in September 1908 and the mine remained in almost continuous operation until its final closing in 1963. The mine was one of the Roundup district's major producers throughout its period of operation. A year after the mine opened it produced 193,530 tons of coal. For more than fifty years the mine would continue to produce from 200,000 to 400,000 tons annually on a fairly consistent basis.

The main opening of the mine was a 25 percent slope 1,600 feet long. Ventilation was provided through a vertical shaft 466 feet deep with air blown by a 5-foot fan driven by a 75-horsepower electric motor which delivered 90,000 cubic feet per minute to the workings. The room-and-pillar system was followed in working the coal bed which was about 50 inches thick. The mined coal was loaded into mine cars by crawler-mounted, mobile loading machines. The cars were hauled about three miles from the working faces to the bottom of the slope by a 36-ton trolley locomotive. Ten cars at a time were then pulled up the single-track slope to the tipple by a 400-horsepower electric hoist. The coal was screened and loaded into railroad

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*The following section on the Commerical Mine or Roundup Mine No. 3 is from a report submitted in December of 1982 (Anderson 1982) but is included here for the convenience of the Department.

cars which were moved from the tipple over four tracks of the Chicago, Milwaukee, St. Paul and Pacific Railroad.

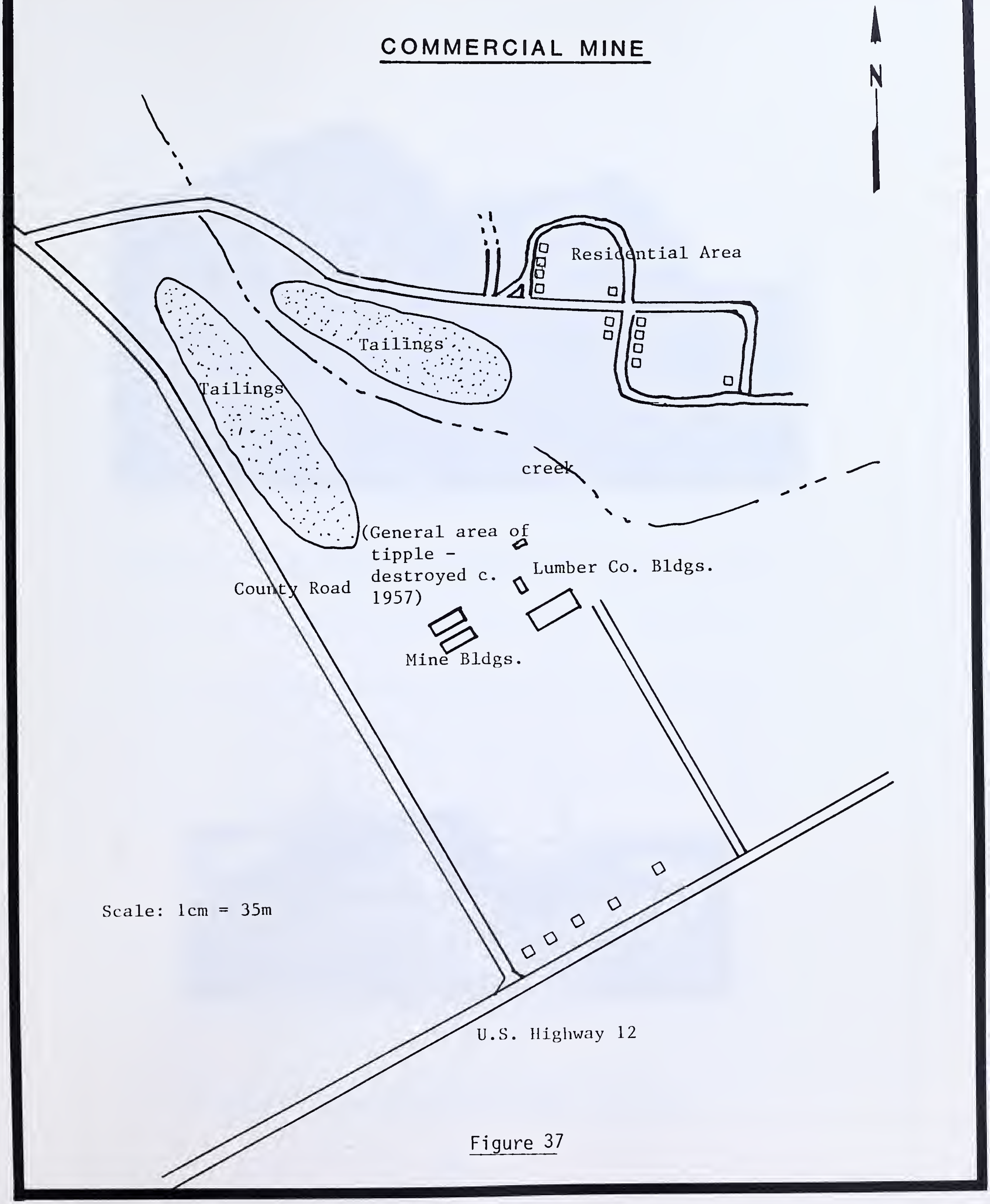
The mine was kept dry by two permanent pumping stations in the mine which pumped about 12,000 gallons of water a day. The mine employed an average of 220 men with 150 working underground and 70 on the surface. Coal produced at the mine was sold to sugar refineries in Montana, the smelter in East Helena and to domestic users in North Dakota, South Dakota and Montana (Travis and Turnbull 1950; Woosley 1917).

Evaluation: Amost nothing remains at this location which would even identify it as a mining site. The two remaining structures are in a dilapidated condition and have no architectural or technological significance. Most of the mine site is currently used as a lumber yard operation which has obliterated any material remains from the mining period. It is unlikely that further work on the site would reveal additional information on mining history and technology during this period.

National Register Statement: The site lacks integrity due to the destruction or removal of almost all the material remains from the original mining operation on the site. The site does not meet the eligibility requirements for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands considers the tailings on the site to be a safety and health hazard and plans to reclaim or remove them. This plan would not have a detrimental effect on the site since it is not eligible for listing on the National Register of Historic Places. The site has been recorded, mapped and photographed and no further work is recommended.

COMMERCIAL MINE



Scale: 1cm = 35m

Figure 37

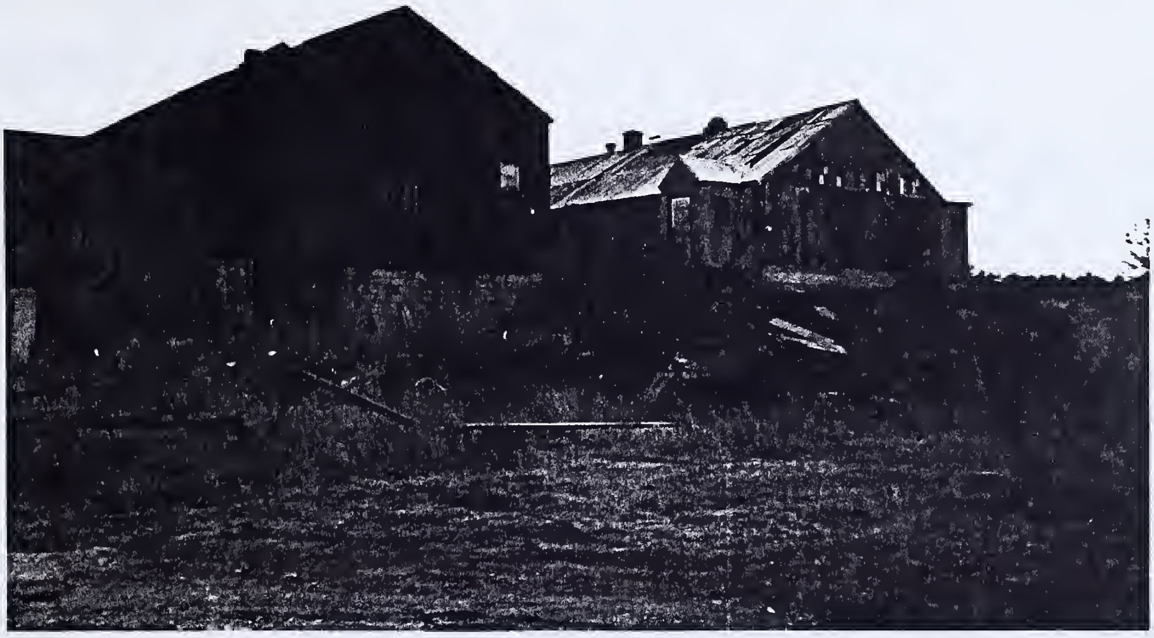


Figure 38. Two remaining mine structures (looking northwest).

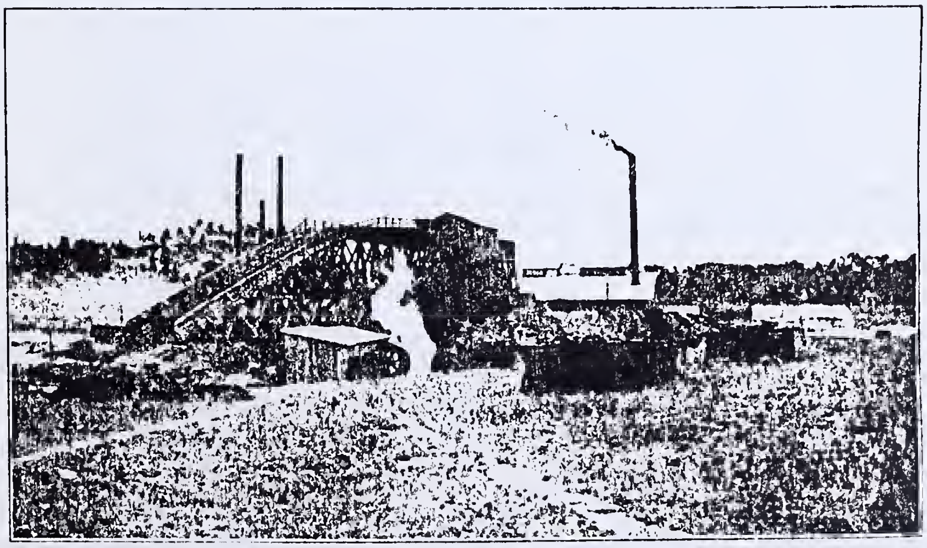


Figure 39. Photo of original tipple circa 1917.

Site Identification: 24ML195 - Jeffries Section 18

Location: N1/2 SW1/4 of section 18, T8N R25E

Area: 15,000 m^2

Elevation: 975 m

Description: The site consists of the remnants of a coal mine located on both the north and south banks of the Musselshell River a mile east of Roundup (Figure 40). The mine entrance was located on the south bank at the base of the steeply-rising hill which faces the river. The tipple and scales for the mine were located on the north side of the river. Little currently remains on the site from the mining operation.

Structures and Cultural Materials: No structures remain standing on the site. The tipple was originally located north of the river adjacent to the railroad (feature 1). Only the concrete footing, a concrete slab and lumber debris remain of the tipple. Also adjacent to the railroad tracks is the concrete pit (measuring 2 x 13 m) and a small partially collapsed 1.2 x 2 m shed for the scales (feature 2). A coal waste dump is on the banks of the river at the south end of the tipple foundation (feature 3). On the south side of the river opposite from the tipple remains is a concrete-filled pipe (feature 4) which appears to have been an anchor for a bridge or tramway across the river from the mine to the tipple. A small 4 x 5 m concrete foundation is 50 m east of the river. The mine entrance is located at the base of the steeply-rising hill which faces the river (feature 6 - Figure 40). A six meter long concrete wall (feature 7) is 40 m northwest of the mine adit. Adjacent to the wall is a metal tank. Other cultural materials consist of miscellaneous metal and lumber debris and coal waste dumps.

Historical Development: The site area was first acquired by John W. Newton on June 8, 1906 as a cash entry patent (#955). There is no evidence that Newton ever mined coal on the property although he did operate a small coal mine on the Horsethief Creek during the 1920s (Roundup Record May 12, 1922). The first mining on the site was undertaken by a group of Minneapolis businessmen as the M & M Mine. The enterprise was not very successful and never went into commercial production. The Minnesota group was plagued by financial problems until creditors took over the property (Cebull 1958; Roundup Record February 15, 1929).

In 1928 the mine was acquired by the Jeffries Coal Mining Company. The company had operated a small mine on Horse Thief Creek for 12 years. The mine was said to have been one of the best small mines in the area, producing an average of nine tons per-man per-day, but by 1928 it had been worked out and had to close. The company moved its operation to the M & M, bought new equipment and leased 140 acres from the Republic Coal Company. In March of 1929 the mine went into production and by 1933 it produced 23,491 tons. The mine continued to operate profitably until the spring of 1940. Due to the mine's location next to the Musselshell River it had a history of water problems which was kept under control by continuous pumping. However, high water in the river during the 1940 spring runoff flooded the mine and it was never reopened (Cebull 1958; Roundup Record February 15, 1929; March 22, 1929).

Evaluation: Little remains on the site from the mining operation. There are no standing structures and only foundation footings mark the site of the tipple. There is no other physical evidence from the mine facilities of any significant historical or technological interest.

National Register Statement: The physical integrity of the site has been destroyed and thus the site is not recommended for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close the mine opening and either remove or reclaim the coal waste areas. The mine opening is an obvious safety hazard while the coal waste areas are a source of pollution to the Musselshell River. The Department's plans should be allowed to proceed on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

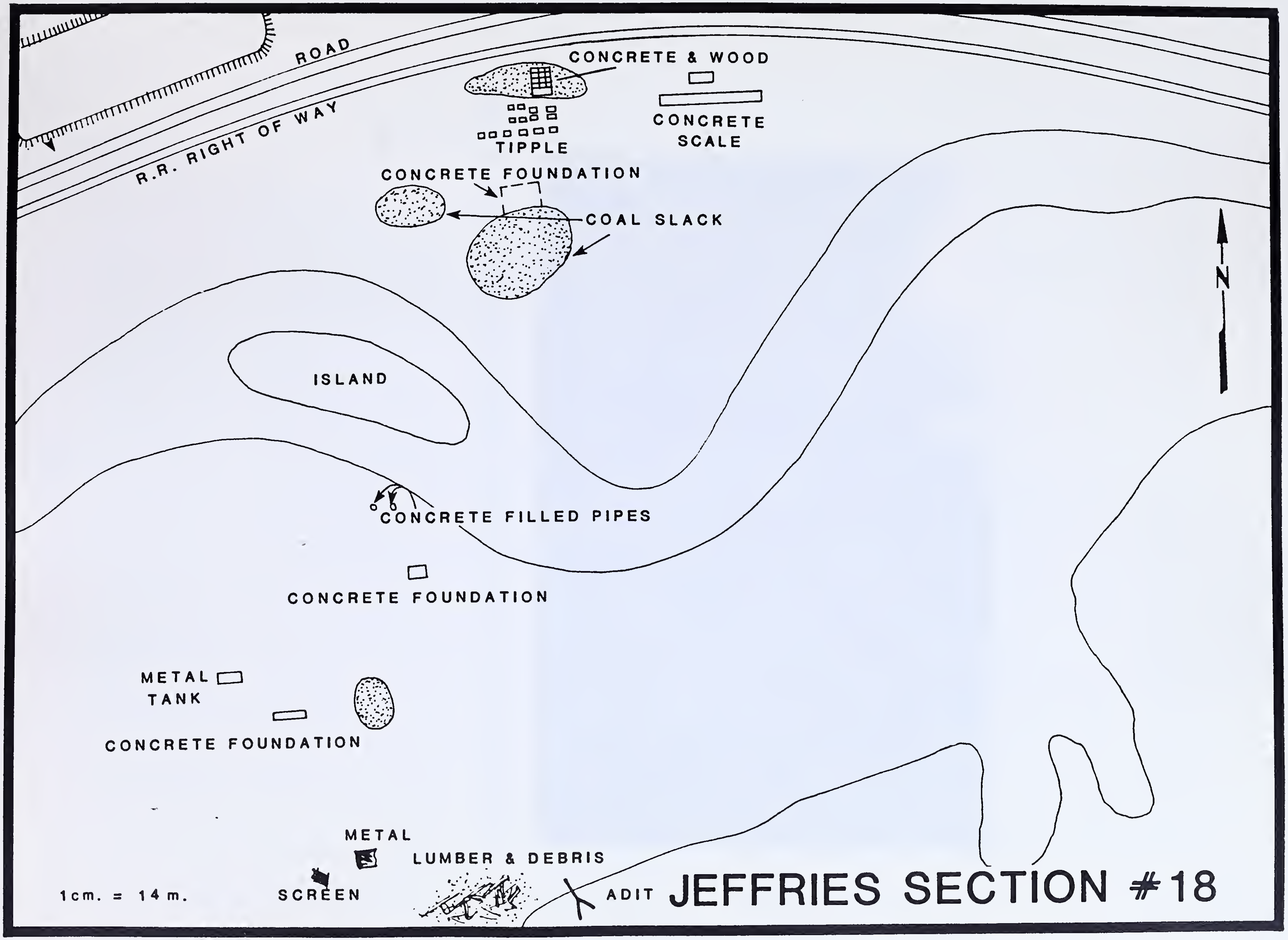


Figure 40. Jeffries 18 site map.

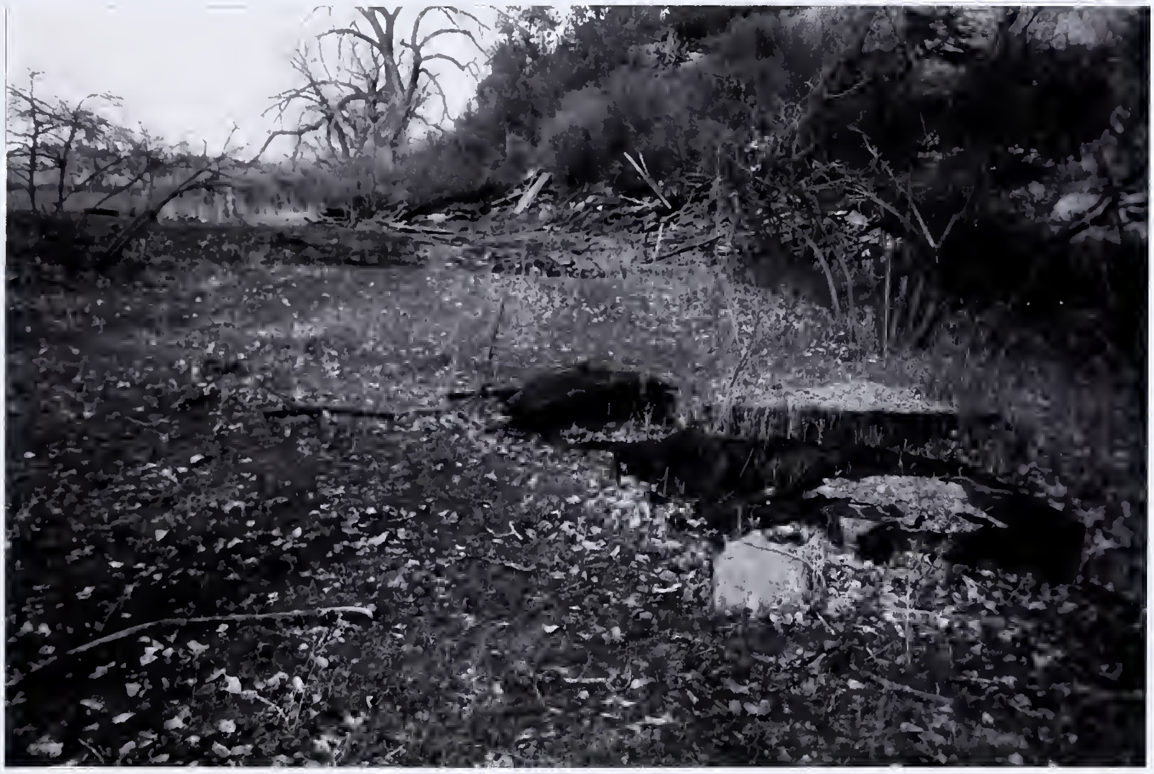


Figure 41. View of Jeffries Section 18 mine entrance area looking north.

Site Identification: 24ML196 - Davis No. 4 Mine

Location: NW1/4 SE1/4 section 17 and NW1/4 SW1/4 section 16, T8N R26E

Area: 70,000 m^2

Elevation: 981 m and 994 m

Description: The site consists of the remnants of two separate mine workings of the same coal bed by the same company. The original mine was located on the flood plain adjacent to the Musselshell River (Figure 42) while the second mine is located one-half mile east of the original mine in wooded, hilly country (Figure 43). Little remains at either site area except for a partially collapsed tipple at the second mine workings.

Structures and Cultural Materials: The dominant feature at the original mine site is a large coal slack area. There are no standing structures left on the site. On top of the hill above the adit entrance is the concrete foundation for the housing on top of a shaft (approximately 20 m deep) which measures 4 x 10 m. A small collapsed wood shed is adjacent to the foundation. The open adit entrance is found at the base of the sandstone cliff (feature 2) and just west of the entrance is a rock with "D.H. 10" carved into it. Feature 3 is a concrete and brick foundation measuring 3 x 7 m which may have been a mine fan housing. A few meters east of the foundation are concrete footings for a tipple.

At the second mine workings there is an open air shaft (feature 1) capped by a small 2 x 2 m concrete housing. North of the shaft is the slope mine entrance (feature 2) and in front of it is a coal slack pile and the remains of the tipple (feature 3 - Figure 44). The tipple is constructed of wood and has partially collapsed. The part still standing measures 6 x 9 m. Feature 4 is a 1.2 x 6 m concrete foundation just west of the tipple. Scrap metal debris was observed at the north end of the tipple.

Historical Development: The No. 4 Mine was one of the earliest major mines in the Roundup area when it was first opened in 1909 by the Davis Coal Company, of Omaha, Nebraska. The mine quickly became a major producer with a daily output of 500 to 1000 tons, employing some 200 men. In June, 1911 the property was bought from Wallace Millard by the Roundup Coal Mining Company. The new owners installed a new tipple and screening plant and, more important, a new electric water pump since the mine had considerable water problems due to its location next to the river. Plans were even made for creating a town of Davis and lots were platted and sold near the mine site. However, the water problems proved to be insurmountable and in the spring of 1914, the mine flooded and was abandoned. The mine's equipment was moved to the Carpenter Creek Mine (Woolsey 1917; Cebull 1958; Roundup Record January 14, December 9, 1910; June 9, 1911, March 29, 1912; May 2, 1913).

Three years later the operation had a brief revival when the property was acquired by the Republic Coal Company. The company planned to reopen the workings for the Milwaukee Railroad. The second adit was apparently put in during this period between 1917 and 1918 and attempts were made to drain the mine workings. Apparently these efforts were not successful since there is no record of the mine going back into full production. Another attempt to resume production was reportedly made by

Fred and Gus Nies who bought the mine around 1920 but, at best, the mine was operated for only a limited period before closing for good (Roundup Record March 23, 1917; April 19, 1918; Cebull 1958; Cross 1984).

Evaluation: Little remains from the mining operation at either component of the site. The only standing structure is the tipple which has partially collapsed. The only other remaining features are foundations and coal waste dumps. It is unlikely that further work on the site would reveal any additional information.

National Register Statement: The physical integrity of the site has been seriously impaired. Almost all structural evidence on the site has been either destroyed or removed. The only remaining standing structure is the tipple which is partially collapsed and is of no particular historical or technological significance. The mine was a short-lived operation which was of no great economic significance. The site is not recommended for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close the mine openings, remove any hazardous structures and either remove or reclaim the coal waste areas. The mine openings on this site are especially dangerous. The tipple is in poor condition and is also a hazard, while the coal waste areas are a source of pollution to the Musselshell River. The Department's plans should be allowed to proceed on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

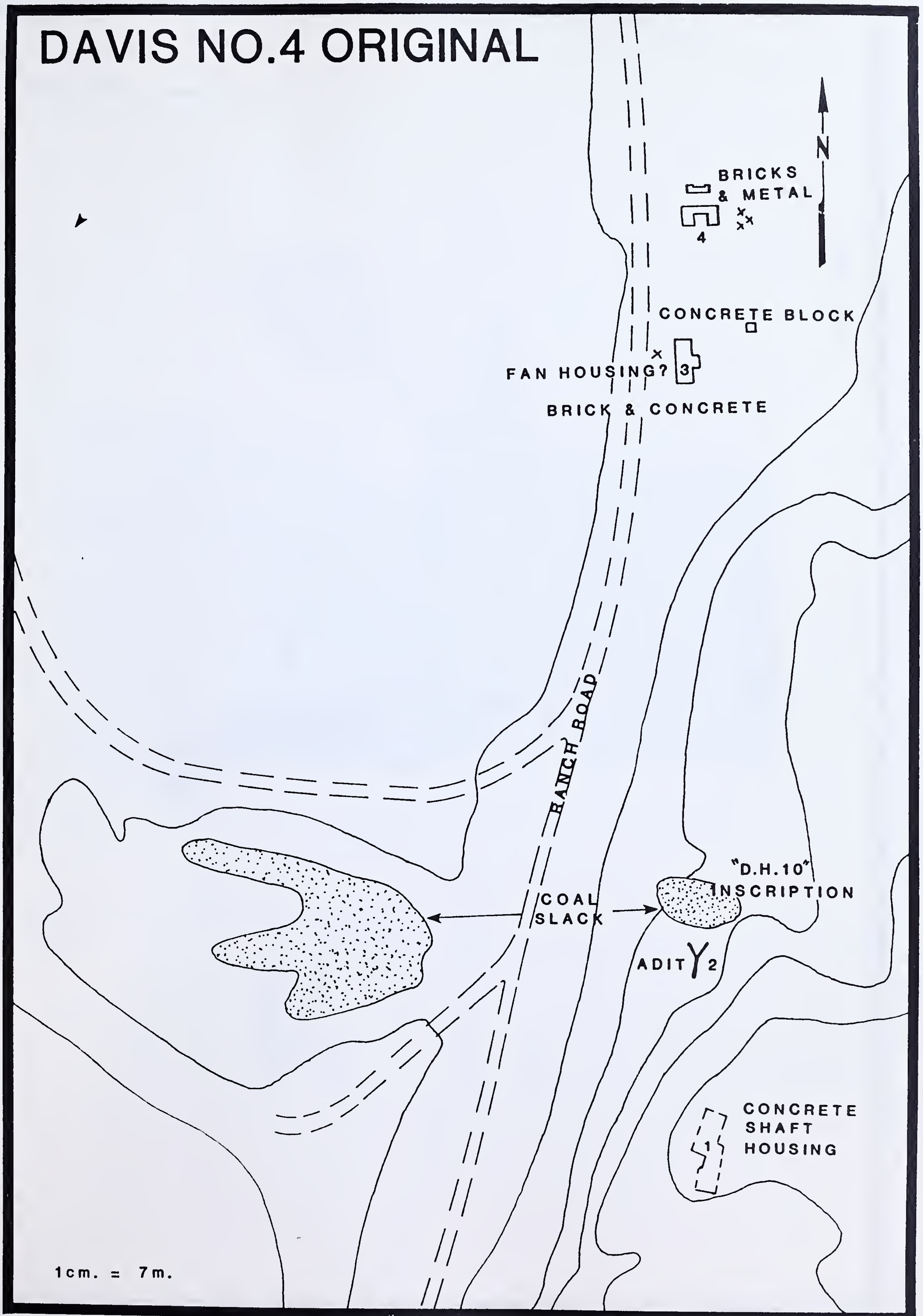


Figure 42. Davis No. 4 original site map.

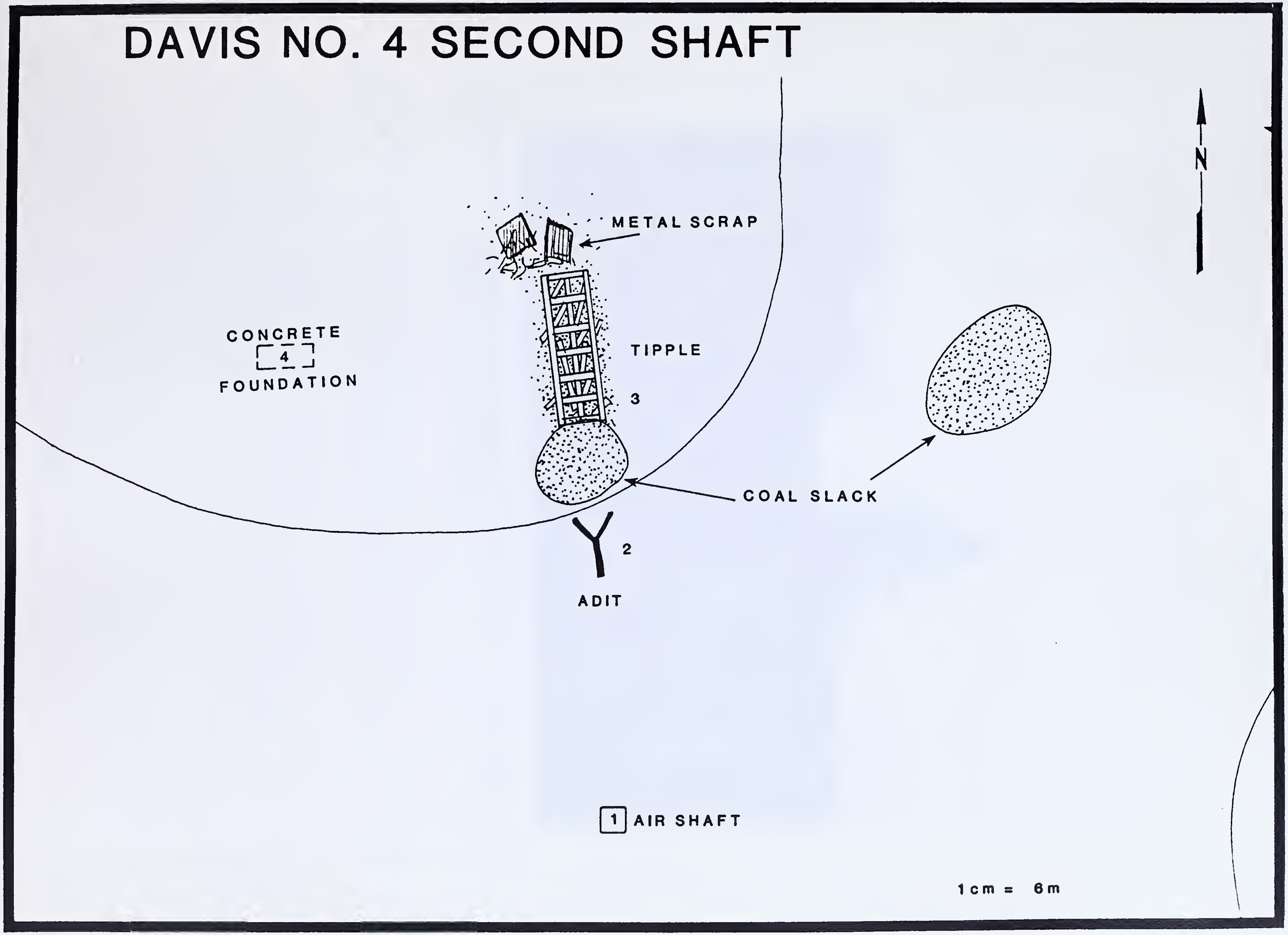


Figure 43. Davis second site map.

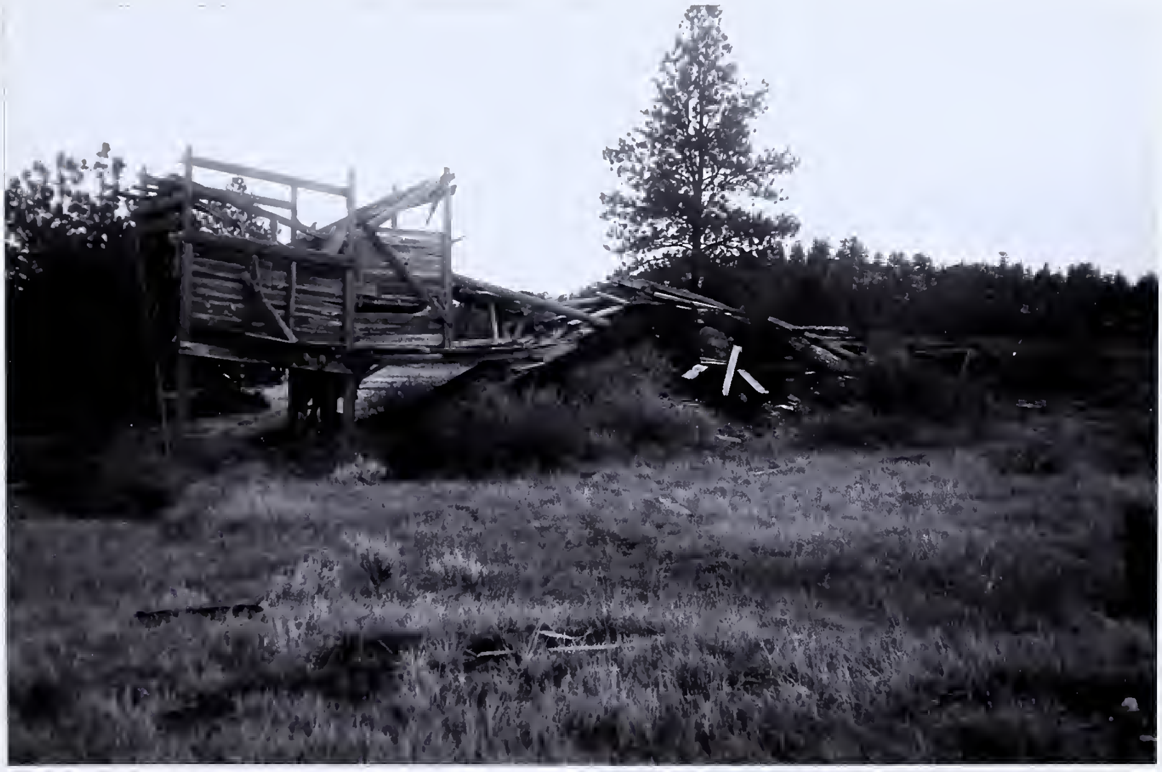


Figure 44. Remains of the tipple at the Davis No. 4 second mine (view to the southeast).

Site Identification: 24ML197 - Black Diamond Mine

Location: S1/2 SE1/4 NW1/4 section 18, T9N R30E

Area: 35,000 m^2

Elevation: 957 m

Description: The site consists of an abandoned coal mine located alongside the county road through section 18 in rolling, wooded terrain (Figure 45). The most prominent features left on the site are coal waste dumps. There are also adit entrances, foundations and debris from this small-scale mining operation.

Structures and Cultural Materials: No standing structures remain on the site, most of which is covered with coal waste dumps (Figure 46). Two adit entrances can be seen on the west side of the site (features 1 and 2). Feature 3 consists of a 3 x 5 m concrete slab. A second foundation (feature 4) measures 2 x 15 m and is of sandstone and wood. The possible remains of a small wooden tipple (feature 5) are found near the center of the site area. A 4 x 8 m log foundation is at the east side of the site with a possible air shaft (feature 7) and a possible adit (feature 8) located 25 m south of the foundation. Four mine cars remain on the site along with a scatter of metal and lumber debris.

Historical Development: The area on which the site is located was first patented to Fred F. Rolph on September 20, 1917 as a homestead entry (#601038). It is not known if Rolph first developed the small wagon mine which existed at the site during the 1920s. The mine produced about 10 tons a day when it was sampled in 1927. The traditional room and pillar method was used in the workings. The coal was undercut by hand and then shot down with black blasting powder. The coal was then run over screens to produce lump, egg, nut and slack. The mine does not appear to have been in production for a long period of time (Turner 1932).

Evaluation: The surface facilities of the mine have been vitually eradicated. Little remains other than foundations and coal slack dumps. The site was a small wagon mine of relatively minor importance to the area's economy. It is unlikely that further work on the site would reveal additional information.

National Register Statement: The physical integrity of the site has been all but destroyed with only remnants remaining of this relatively minor coal mining operation. The site is not recommended as eligible for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close any mine openings and either remove or reclaim the coal waste areas. The mine openings are an obvious safety hazard and the coal waste areas are a source of pollution to the local ground water. It is recommended the Department's plans be allowed to proceed on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

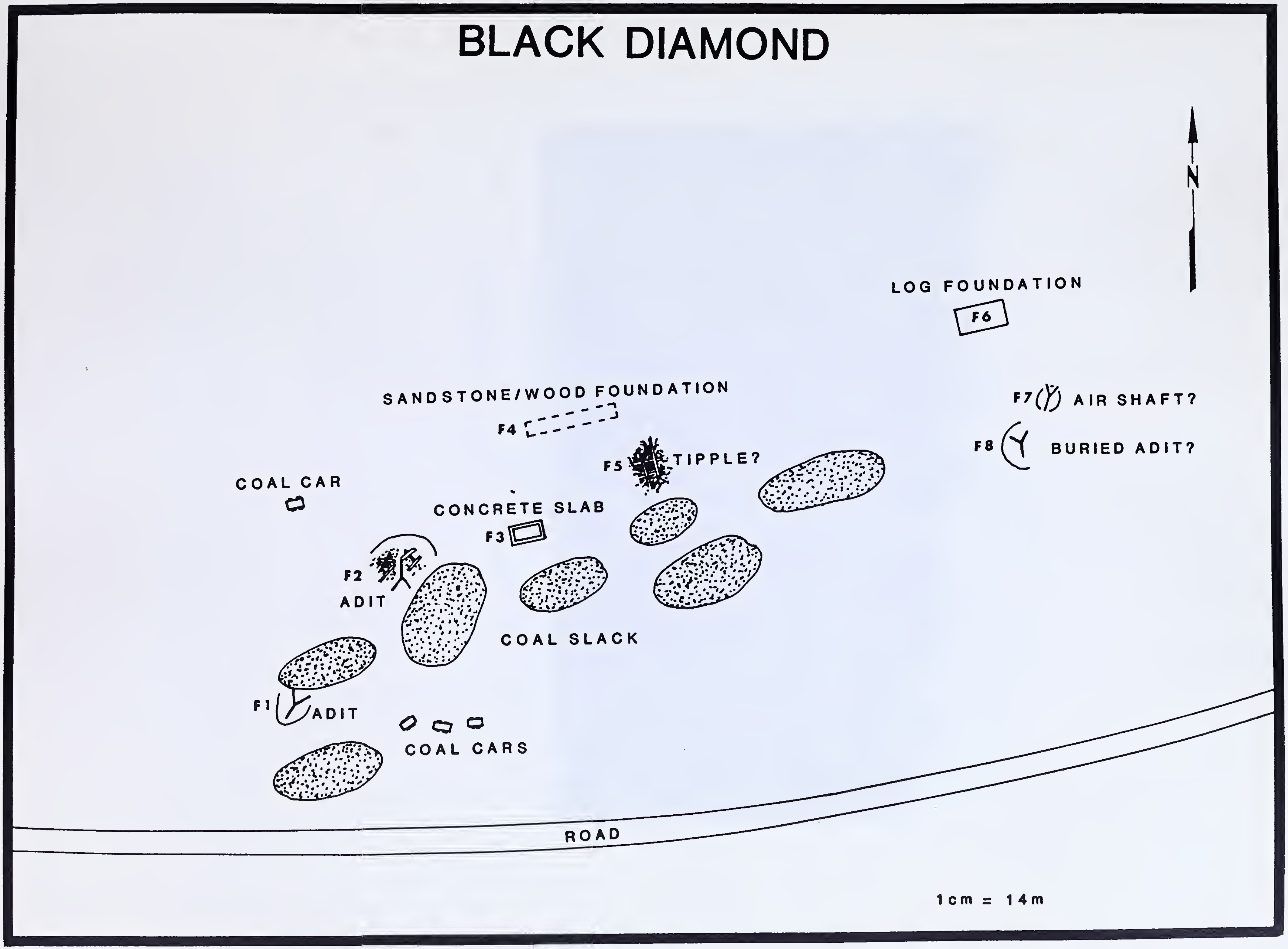


Figure 45. Black Diamond site map.

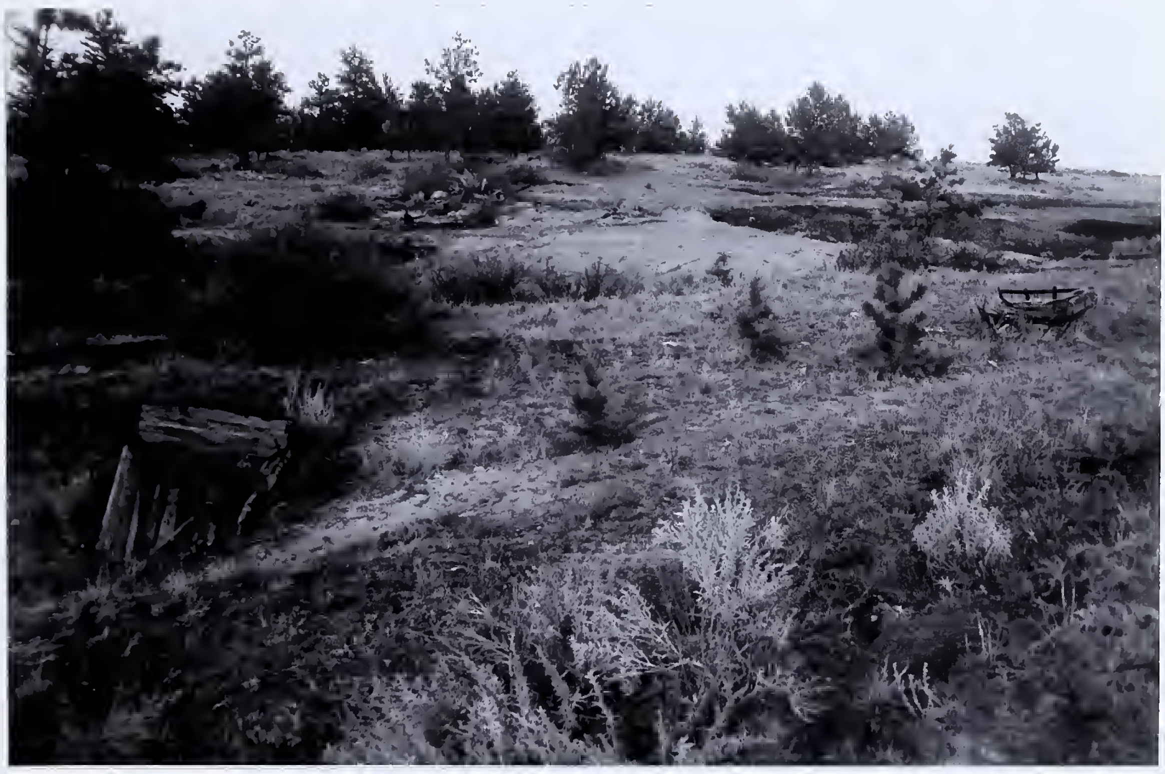


Figure 46. Site area of the Black Diamond Mine (view to the northeast).

Site Identification: 24ML198 - Carpenter Creek Mine

Location: NW1/4 NW1/4 NE1/4 section 20, T9N R30E

Area: 23,000 m^2

Elevation: 915 m

Description: The site consists of the remains of a large coal mine located in open, rolling rangeland on a small tributary of Carpenter Creek (Figure 47). Most of the mine's surface facilities have been destroyed or removed leaving only foundations and coal waste dumps.

Structures and Cultural Materials: The largest structural remains on the site is the 11 x 12 m concrete foundation for what may have been the mine's boiler room. Adjacent to the foundation on the north side is the brick base of a chimney (feature 2). All that remains of the tipple (feature 3) are concrete footings (Figure 48). A concrete tank measuring 4 x 8 m and 2.5 m deep with a middle wall is located on a slight hill at the south end of the site (feature 4). Feature 5 consists of a 7 x 21 m concrete slab foundation. Lumber debris fills the small gully on the east side of the site while miscellaneous debris is scattered throughout the site.

Historic Development: The land on which the Carpenter Creek Mine was located was first patented to Charles M. Jacobs, Byron C. Jacobs, Vincent C. McCleary and Rose A. McCleary on October 20, 1910 as a cash entry patent (#158364). Two years prior to obtaining patent on the land, McCleary apparently formed the McCleary Coal Company and sank a prospect shaft into the newly discovered Carpenter Creek coal field. The producing coal mine was not developed until five years later during the summer and autumn of 1913. A 138-foot vertical shaft was sunk to the coal seams and within a short time the mine was producing 600 to 700 tons a day during the winter months and employed about 180 men. A railroad spur was built from the mine to the main line of the Milwaukee Railroad. Equipment from the abandoned Davis No. 4 Mine was installed in the Carpenter Creek Mine and numerous surface buildings were constructed. Later the communities of Absher and Carpenter Creek would grow near the mine. However, during this period the McCleary Coal Company sold out to A. A. Morris, president of the 1st National Bank of Roundup in October, 1913. Morris formed the Carpenter Creek Coal Company which ran the mine for two years and then sold out to the Republic Coal Company which ran the mine until 1922 when it closed. Three years later it was reopened by H. S. Hopka, the general manager of the Roundup Coal Company, who kept the mine running until the end of the 1920s (Woolsey 1917; Cebull 1958; Roundup Record October 3, 1913; September 18, October 2, 1925; August 3, 1928; Turner 1933).

Evaluation: Although the Carpenter Creek Mine was the first major coal mine to be established in the Carpenter Creek area and was a large producer for the better part of two decades, almost nothing remains in the mine area from this once substantial operation. Only foundations and coal waste dumps mark the mine site. It is unlikely that further work in the area would reveal additional information.

National Register Statement: The physical integrity of the site has been destroyed. The site is not recommended as eligible for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to either remove or reclaim the coal waste areas which are a source of pollution to Carpenter Creek. These plans should be allowed to proceed on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

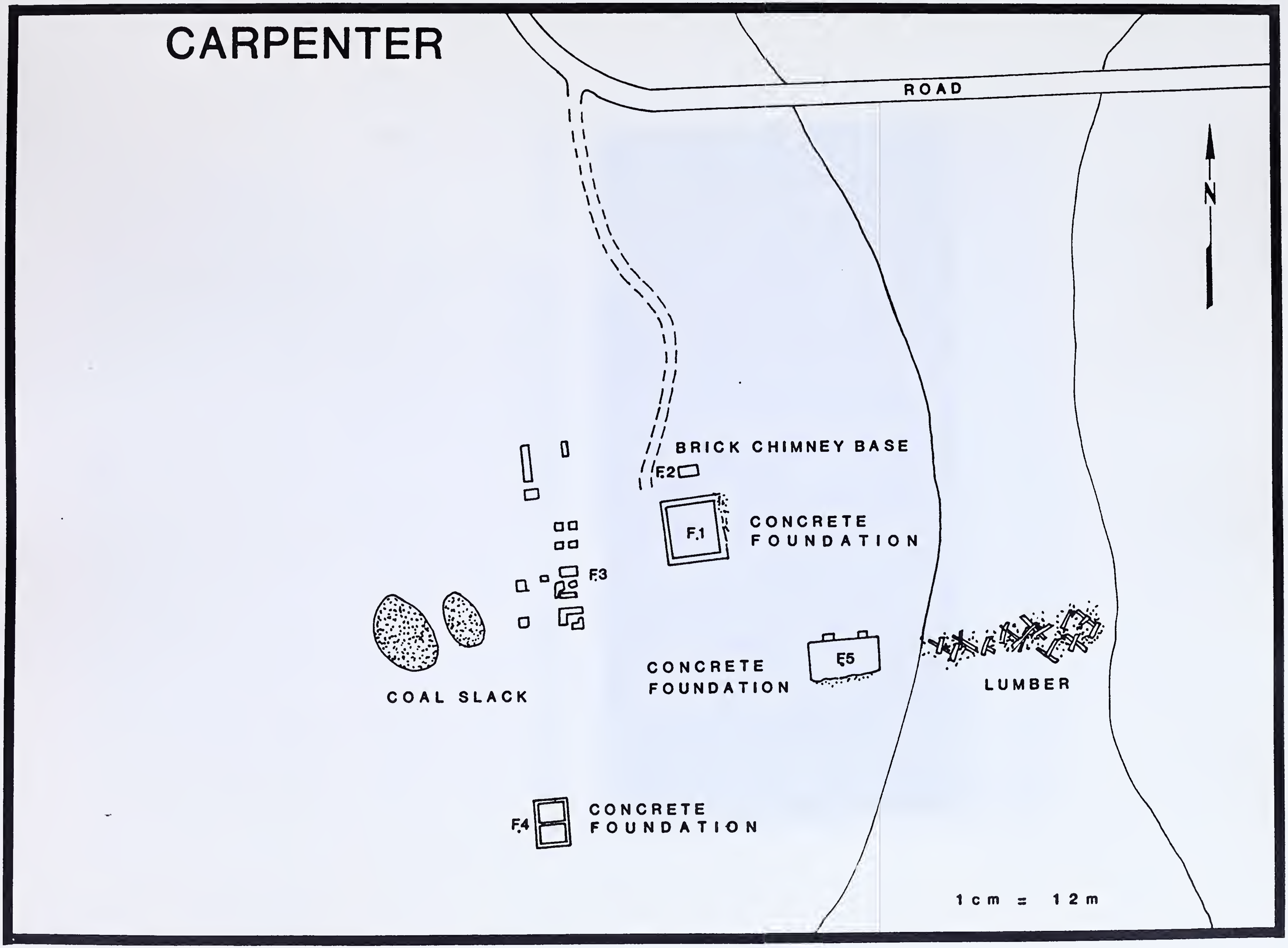


Figure 47. Carpenter site map.

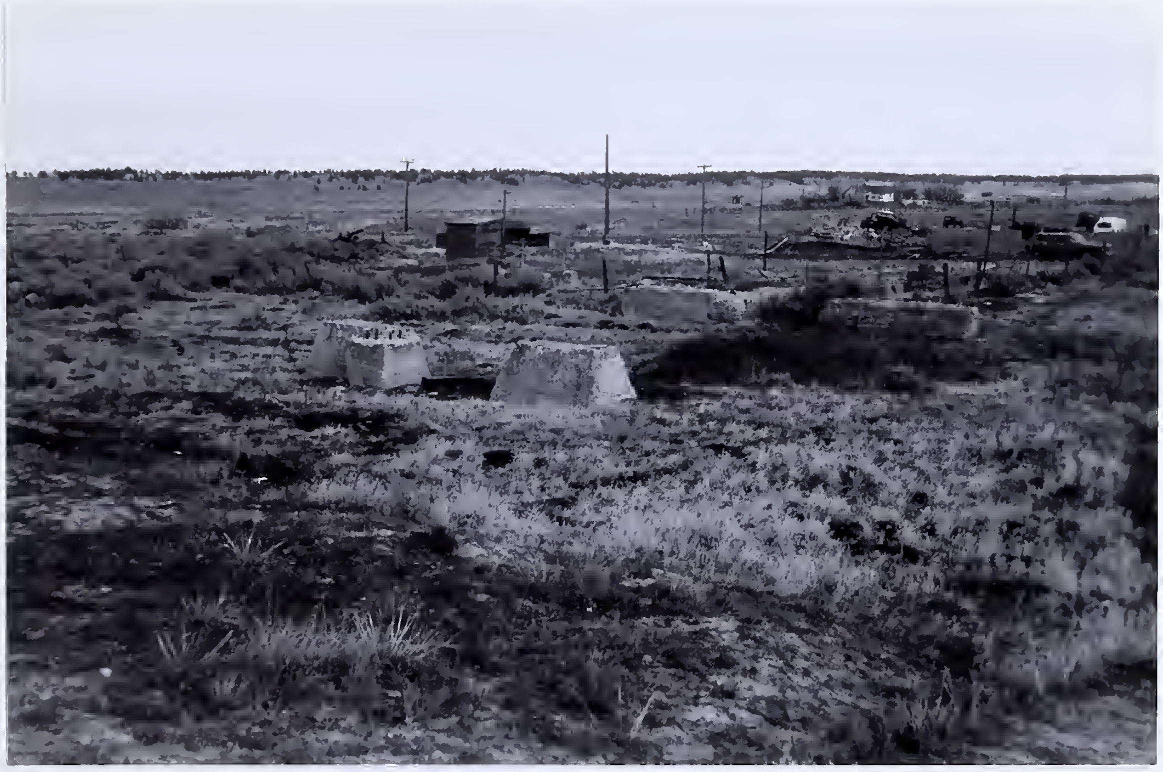


Figure 48. Footings for the tipple at the Carpenter Creek Mine (view to the northeast).

Site Identification: 24ML199 - Keene No. 2 Mine

Location: NW1/4 SW1/4 NW1/4 section 26, T9N R30E

Area: 108,000 m^2

Elevation: 945 m

Description: The site area is located on an open, slightly elevated rangeland surrounded by distant wooded hills (Figure 49). The remnants of the coal mining operation are dissected by the East Fork of Carpenter Creek which runs through the site at the south end and along the east edge. Most of the mine's facilities remain, although most are in ruins.

Structures and Cultural Materials: Although there are a substantial number of structural remains on the site, few consist of intact buildings. The major structures are ruins or only foundation remains. Feature 1 is a small 2.5 x 4 m concrete foundation. Adjacent to it is the collapsed ruins of a coal bin with an adjoining collapsed small frame structure (feature 2 - Figure 50). The wood-constructed bin measured approximately 12 x 12 m. Feature 3 is another concrete foundation measuring 7.5 x 10 m. The tipple area (feature 4 - Figure 50) once contained an adit entrance, a tramway for the mine cars and a small cinder block structure with a small chimney of unknown use. The entire complex measured approximately 5 x 25 m. Alongside the tipple is a concrete foundation (2.2 x 7 m) for the mine scales (feature 5). At the west side of the site is a small outhouse and associated cabin/chicken coop/dugout (features 6 and 7). A modern power substation (feature 8) and a 3.5 x 3.5 m concrete foundation (feature 9) are also found on the west side of the site. The largest structure on the site is feature 10 which appears to have been the boiler/power building for the mine. Only the concrete floor and part of the walls remain (Figure 51) of this 12 x 37 m structure. A small 2.7 x 3 m wood shed is adjacent to the stream to the east of the boiler building (feature 11). On the east side of the stream is a concrete foundation and wood shed (feature 12) located at the entrance to the mine entrance (feature 13). Over the entire mine area there is a scatter of metal and lumber debris, auto parts, oil drums and coal waste areas.

Historic Development: The section in which the site is located was originally a railroad grant given to the Northern Pacific Railroad on September 29, 1910 (patent #154902). No attempt was made to develop a mine on the site although two prospects were sunk in the east part of section 26 during this period which showed a thick seam of coal (Woosley 1917).

It was not until 1946 that the Bair-Collins Company began to develop the property as the Keene No. 2 Mine. By August of that year the mine was in production, producing about 400 tons a day. The mine immediately became a major producer and mined 79,626 tons of coal in 1947. The mine's main entrance was a drift into the outcrop which sloped down to the coal bed about 150 feet underground. The standard room-and-pillar method was used in the mine. The mine was well equipped. A five-foot fan driven by a 15-horsepower electric motor supplied 40,000 cubic feet of air per minute to the mine. One pump with a capacity of 4,000 gallons per hour kept the mine dry. Two cut-and-shear machines and one undercutting machine were in use to prepare the coal face for blasting. Then electric drills were used for the charges which were fired electrically at the end of the shift. Two

track-mounted mobile loading machines were used to load the loose coal into the 38 four-ton cars used in the mine. One six-ton electric gathering locomotive was used for each loading machine and then a a 10-ton electric trolley locomotive would take the loaded cars to the storage bin on the surface. The coal was then hauled five miles to a tipple at the railhead by two 16-ton trailer trucks. About 50 men were employed in the mine. Half of the coal went to a power plant and hospital in South Dakota. The other half went to dealers for sale as domestic fuel in Montana, the Dakotas and Minnesota.

During the late 1950s the mine had a contract to sell coal to the Atomic Energy Commissions's Hartford plant in Washington. The mine closed for good in 1960 (Travis and Turnbull 1950; The Roundup Record-Tribune July 24, 1947; January 30, 1958).

Evaluation: The basic layout of the mine's surface facilities is still evident although most of the structures are in ruins or consist of only foundations. The few intact structures such as features 11 and 12 are not of great importance. It is not known if features 6 and 7 are associated with the mine although it would appear they were not. It is unlikely that further work on the site would reveal additional information.

National Register Statement: The site was first developed in 1946 making it considerably less than 50 years old and the physical integrity of the site is badly deteriorated. The site is not recommended as eligible for listing on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close the mine openings, remove any hazardous structures and either remove or reclaim the coal waste areas. The mine opening is an obvious safety hazard and the coal waste dumps are a source of pollution to the adjacent East Fork of Carpenter Creek. The Department's plans should be allowed to proceed on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

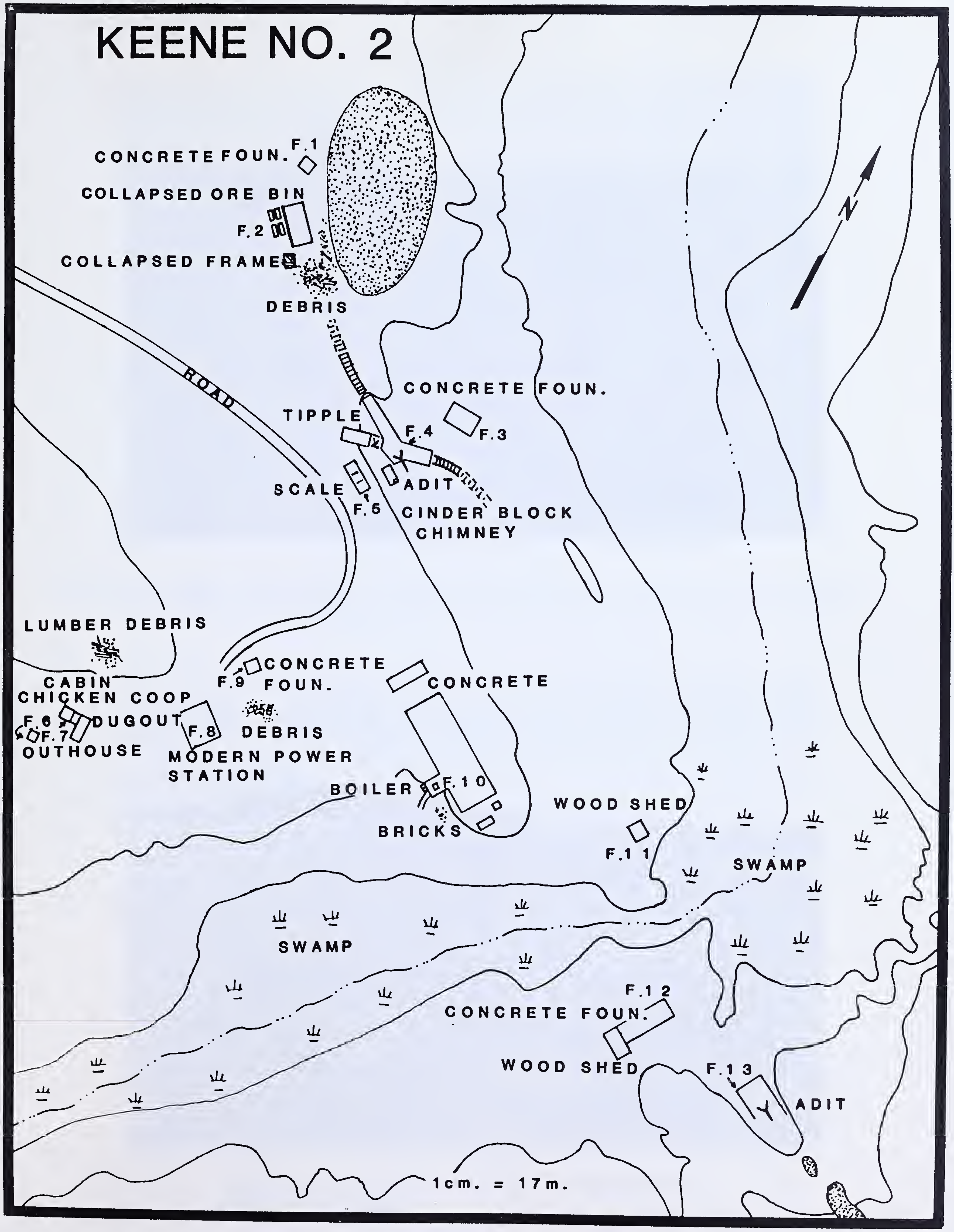


Figure 49. Keene No. 2 site map.

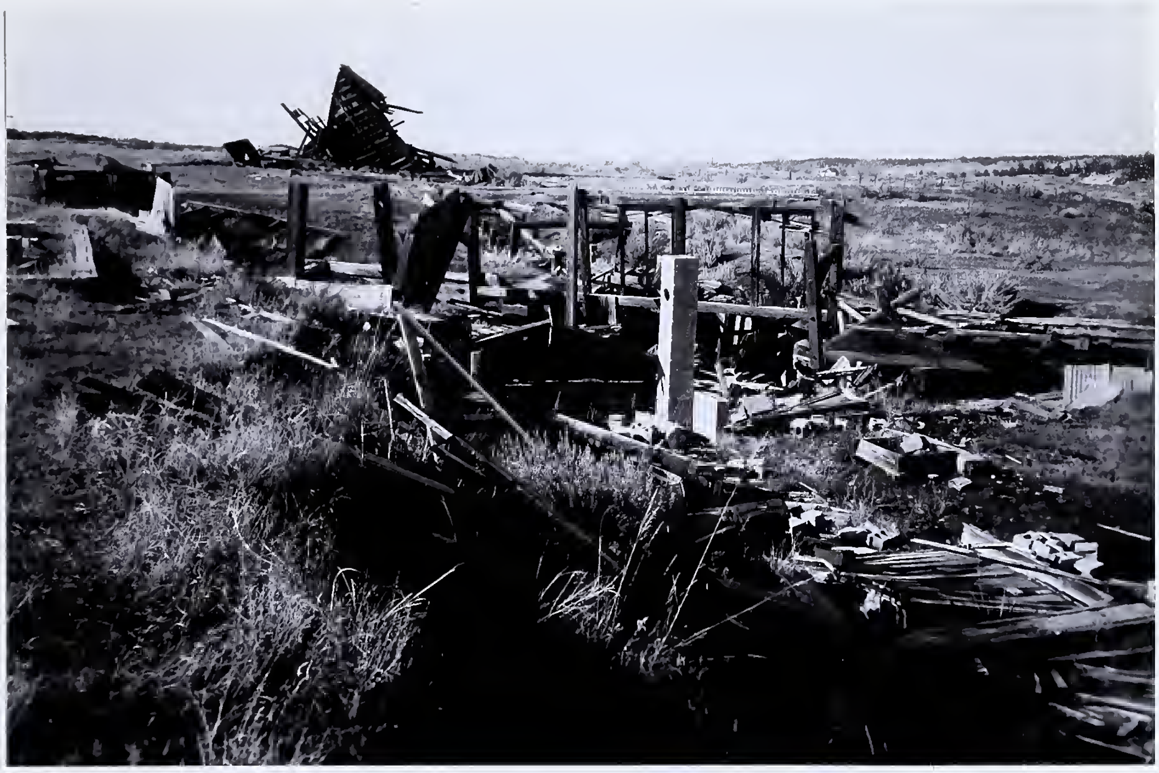


Figure 50. Keene No. 2 tipple remains with collapsed coal bin in background (view to west).

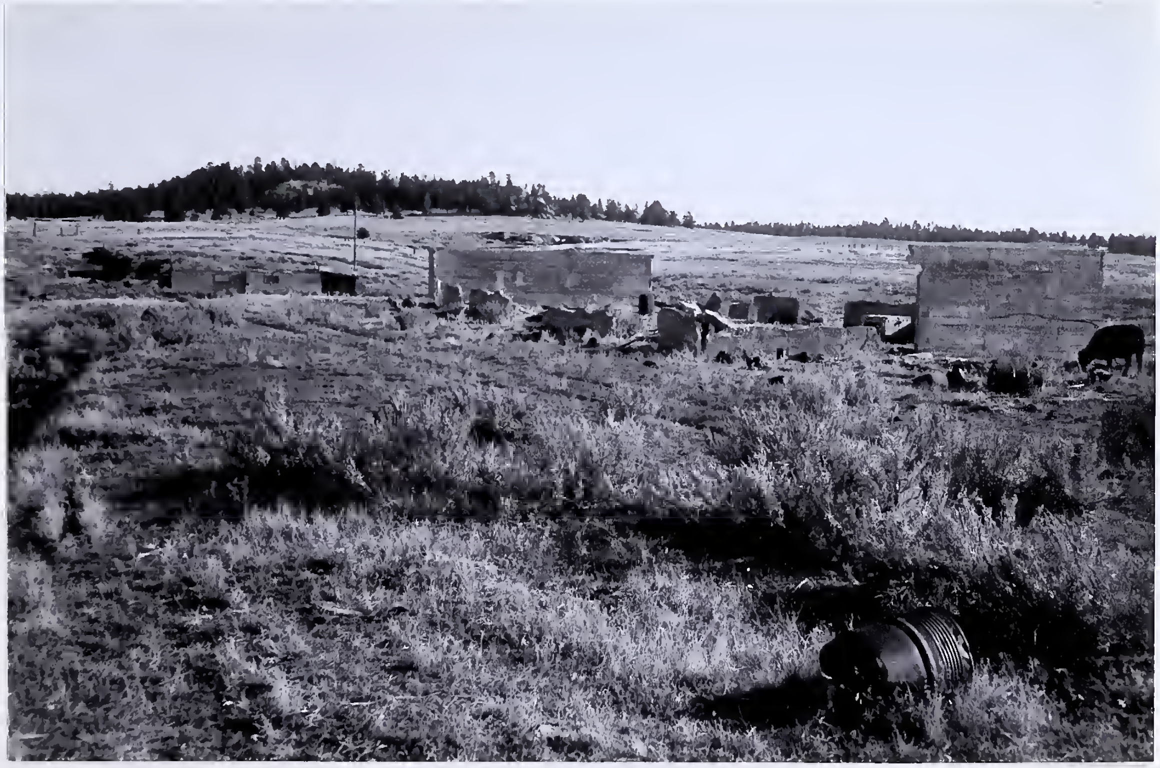


Figure 51. Remains of the boiler building at the Keene No. 2 Mine (view to the east).

Site Identification: 24ML200 - Howard Mine

Location: SW1/4 NW1/4 section 3, T8N R31E

Area: 1800 m^2

Elevation: 994 m

Description: The site consists of a small coal mine located near the head of a gully in hilly, heavily wooded country (Figure 52). All that remains on the site from the mine is an open adit portal at the base of the hill on the west side of the gully and scattered coal waste areas.

Structures and Cultural Materials: No structural remains from the mining operation are on the site. Only an open adit portal and coal waste areas indicate the existence of the mine (Figure 53).

Historical Development: The section in which the mine is located was originally a railroad patent given to the Northern Pacific Railroad on May 26, 1896 (patent #15). The mine was established on the site around 1919 and kept in operation until about 1930 by George Howard. The mine was a typical small wagon mine which provided coal to local ranchers for domestic use.

Evaluation: Little remains on the site to mark the existence of this small mining operation. There is no evidence of any structural remains and it is unlikely that the mine had any extensive surface facilities when it was in operation. It is unlikely that further work on the site would reveal any additional information.

National Register Statement: The physical integrity of the site has been destroyed. The site is not recommended as eligible for lising on the National Register of Historic Places.

Management Recommendations: The Department of State Lands plans to close the mine entrance and either remove or reclaim the coal waste areas. The mine opening is an obvious safety hazard while the coal waste areas are a source of pollution to the local surface water. The Department's plans should be allowed to proceed on schedule. The site has been recorded, mapped and photographed and no further work is recommended.

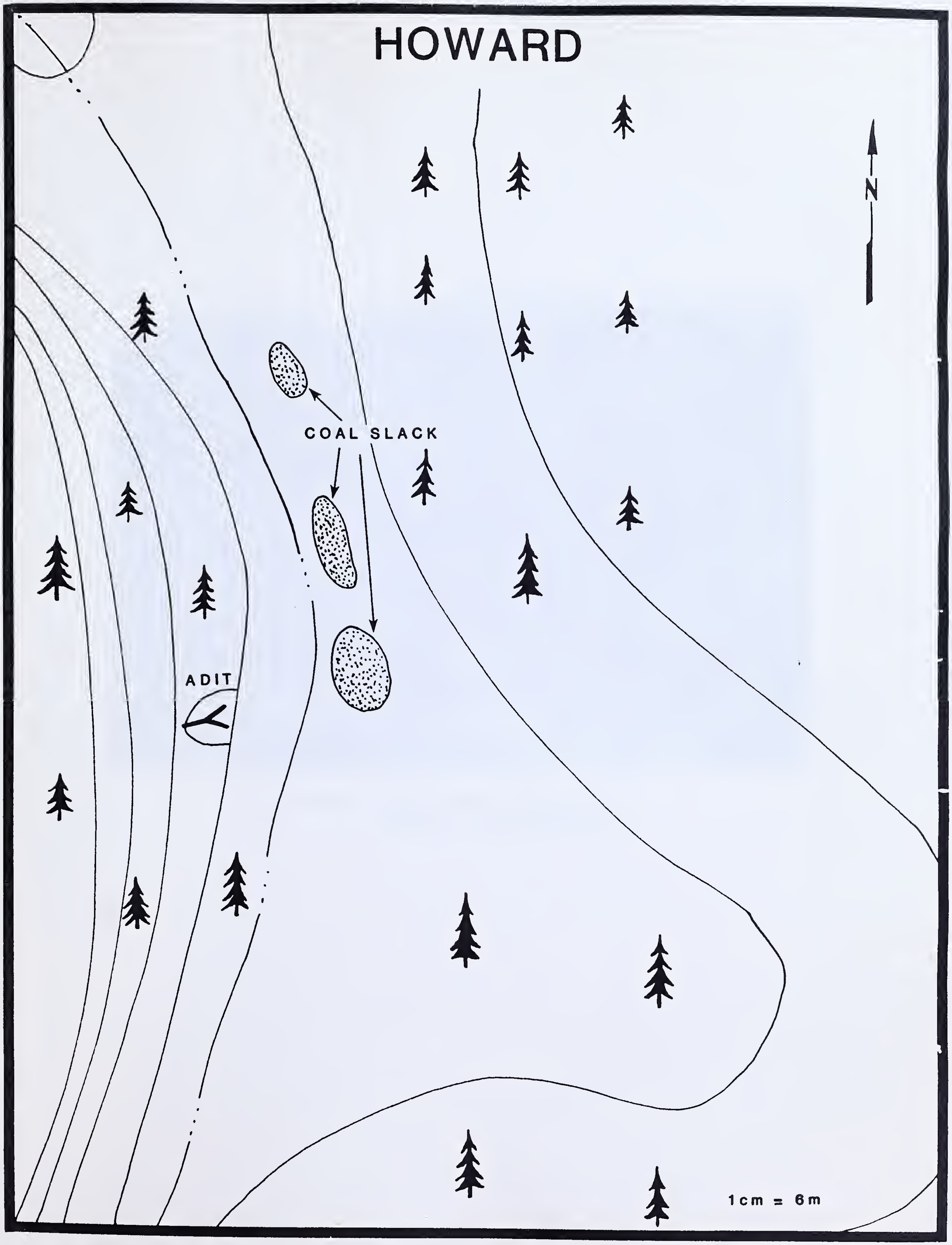


Figure 52. Howard site map.

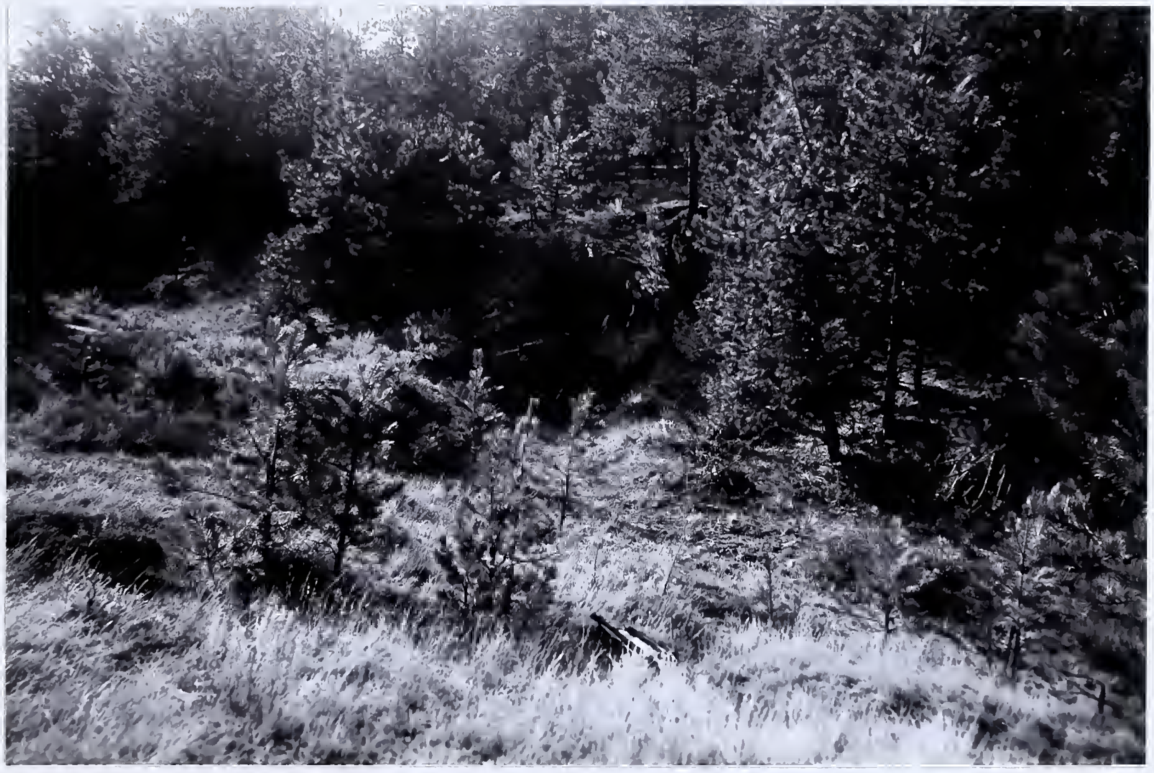


Figure 53. Howard Mine adit portal (view to the southwest).

SUMMARY AND RECOMMENDATIONS

During the course of fieldwork and research for this report the following abandoned coal mines were examined, recorded, mapped and photographed: the Antelope Mine (24ML182), Berten (24ML183), Badovinus and Vic Finco (24ML184), Johnny's (24ML185), Western (24ML186), Jeffries Section 4 (24ML187), Carlson (24ML188), Keene No. 1 (24ML189), Square Deal (24ML190), Nies (24ML191), Nelson Brothers (24ML192), Johnson (original) (24ML193), Johnson No. 2 (24ML194), Jeffries Section 18 (24ML195), Davis No. 4 (24ML196), Black Diamond (24ML197), Carpenter Creek (24ML198), Keene No. 2 (24ML199), and Howard (24ML200) mines in the Bull Mountain coal field. Historic records for the mines were researched and local informants were interviewed whenever possible. The undisturbed areas of the sites were examined for prehistoric cultural resources. No prehistoric cultural remains were found on any of the sites.

Two research objectives of the Abandoned Mines Reclamation Cultural Resource studies program conducted for the Department of State Lands has been to document historic mining and technology in terms of overall systems of operations and to examine any adaptive engineering strategies used by the mine operators to adapt to local conditions. The Bull Mountain coal field provides some examples of mines which did adopt innovative mining techniques while the Bull Mountain coal field is an example of an area where individual mining companies formed an area-wide coal mining industry which became the dominant economic factor in the region for nearly half a century.

The Bull Mountain region was well situated for the development of an extensive coal mining industry. The quality of the coal was generally good throughout the field and the seams were usually easily mined. Classed as a high-grade black lignite or subbituminous, the coal found a ready market for use both by the railroads and as a domestic fuel. The population center at Billings and local farms and ranches furnished a large and fairly accessible market for the smaller mines while the railroad took the bulk of the larger mines' output. The railroad also provided an economic and convenient transportation system to more distant non-railroad markets. In addition, a good road to Billings provided easy access to that market for the smaller mines which were not connected to the railroad. All these factors led to a highly competitive industry which placed a premium on developing efficient operations and, in a few cases, on developing innovative technologies in order to stay competitive.

Most of the larger mines such as the Keene, Republic No. 2 and Commerical employed fairly conventional mining techniques such as the standard room-and-pillar method, but they all seem to show a history of utilizing the latest equipment and were constantly upgrading their facilities. Many of the smaller mines, such as the Western, Johnny's, Nies, Square Deal and Johnson, also employed modern equipment whenever possible in order to stay competative. The Keene No. 1, however, stands out as an example of a mine that altered practically the entire mining operation in order to meet a specific condition.

The Keene No. 1 Mine for the first ten years of its existence, was a marginal operation that had little success, partly because of the fact that the object was to mine a relatively thin coal seam. When the Bair-Collins company took

over the mine in 1920, they completely overhauled the mine so they could profitably work the thin seam. Production was limited to t he most efficient use of equipment and personnel. The mine workings spread out in a fantail system which permitted easy grades into the rooms and made track laying much easier. Mine cars were redesigned to work in the restricted height of the working places and pumps and hoisting systems were made more efficient. These innovative changes allowed the mine to compete with other mines which were working thicl seams and to operate profitably for a decade until the mine was played out in 1930.

Innovative technologies, accessible markets, high quality coal and economical transportation were not, however, sufficient to compete with the one technological change in coal mining introduced into Eastern Montana in the mid-1920s: large-scale strip mining. The rugged terrain of the Bull Mountains and the depth of the coal seams generally made it impractical to strip mine, although a few small strip mines have operated around Signal Mountain and one small strip mine was run for a year by Virgil Cross near the Square Deal Mine. Even now large-scale strip mining in the Bull Mountains, however, would have a difficult time meeting reclamation requirements and underground mining simply can not compete with the large strip mines in the Colstrip area no matter how innovative and efficient the individual mine might be. The history of coal mining in the Bull Mountains is an example of an industry which developed in a region to exploit a resource and prospered because of favorable circumstances and efficient, even innovative technologies. Ultimately, however, the industry could not survive declining demand for coal and the competition from a cheaper and even more efficient technology.

Only two sites are recommended for listing on the National Register of Historic Places: the Antelope (24ML182) and Western (24ML186) mines. Both have a fair to good degree of physical site integrity and both appear to meet criteria A ("are associated with events that have made a significant contribution to the broad patterns of our history") and C ("embody the distinctive characteristics of a type, period, or method of construction [and] that represent a significant and distinguishable entity whose components may lack individual distinction").

The remaining mine sites have either been destroyed to a point where the physical integrity of the site is lost or they date from too recent a period to meet the NRHP 50-year criterion. Sites no longer retaining physical integrity include: the Berten (24ML183), Badovinus and Vic Finco (24ML184), Jeffries Section 4 (24ML187), Carlson (24ML188), Keene No. 1 (24ML189), Nelson Brothers (24ML192), Johnson (original) (24ML193), Jeffries Section 18 (24ML195), Davis No. 4 (24ML196), Black Diamond (24ML197), Carpenter Creek (24ML198), and Howard (24ML200) mines. Sites that do not meet the 50-year guideline would include: the Johnny's (24ML185), Square Deal (24ML190), Nies (24ML191, Johnson No. 2 (24ML194) and Keene No. 2 (24ML199) mines.

A number of major mines were once located in the area just south of Roundup including: the Republic No. 1, Republic No. 2, Prescott and Musselshell. Although these were large operations, hardly a trace now remains other than coal waste and surface subsidence. The physical evidence of these mines has been obliterated to a point where it is no longer possible to determine their exact location.

None of the sites examined for this report would appear to meet criteria D of the NRHP in that they would be likely to yield further information from any additional field work. Additional photographic documentation is recommended for the Western (24ML186) and the Nies (24ML191) if the tipples are determined to be hazardous and must be removed. Otherwise each site has been examined, recorded, mapped and photographed and no further work is recommended.

The mine openings and coal waste dumps are obvious and serious threats to public safety and health. It is recommended that the reclamation plans of the Department of State Lands be allowed to proceed on schedule. If any subsurface prehistoric or historic cultural materials are revealed during the relcamation work, the office of GCM Services, Inc. in Butte and the Montana Historic Preservation Office in Helena should be notified immediately.

BIBLIOGRAPHY

Agogino, George A. and W. D. Frankforter
1960 The Brewster site: an agate Basin Folsom complex multiple component site in eastern Wyhoming. Masterkey 34(3): 102-107.

Alwin, John A.
1983 Eastern Montana: A Portrait of the Land and Its People. Number 2 Montana Geographic Series, Montana Magazine, Inc. Helena, Montana.

Anderson, Paul
1982 Cultural Resource Inventory and Evaluation: The Commercial Mine. Cultural Resource Division, Mineral Research Center, Butte, Montana.

Billings Gazette September 14, 1919; July 3, 1970.

Byrne, William J.
1973 The archaeology and prehistory of southern Alberta as reflected by ceramics. Archaeological Survey of Canada, Mercury Series 14. 3 volumes. Ottawa.

Carlson, Jack
1984 Personal interview, April 24, Roundup, Montana

Cebull, Rudolph J.
1958 History of Coal Mining in Musselshell County, Roundup Record-Tribune. April 3.

Chadwick, Robert A.
1973 "Coal: Montana's Prosaic Treasure", Montana: The Magazine of Western History 23(4): 18-31.

Clawson, Roger
1970 The Billings Gazette. October 25.

Conner, Stuart and Betty Lu Conner
1971 Rock art of the Montana High Plains. The Regents, University of California.

Cross, Virgil
1984 Personal interview, April 23, Roundup, Montana.

Davis, Leslie B.
1975 The Indian Creek coal permit area, Crow Indian Reservation, Montana: archaeological, ethnohistorical and historical heritage baselines. Montana State University Endowment and Research Foundation, Bozeman.

Elasson, Carl
1983 Personal interview, November 10, Roundup, Montana.

Fredlund, Lynn B.
1981 Southeastern Montana in the Late Prehistoric period: human adaptation and projectile point chronology. Unpublished Ph.D. dissertation. Department of Archaeology, Simon Fraser University. Burnaby, British Columbia.

Fredlund, Lynn B. and Dale E. Fredlund
1973 1972 archaeological reconnaissance of Shell Oil Company coal lands, Big Horn County, Montana. Statewide Archaeological Survey Department of Anthropology, University of Montana. Offset.

Frison, George C.
1973 Early period marginal cultural groups in northern Wyoming. Plains Anthropologist 18(62):300-312.

1978 Prehistoric Hunters of the High Plains. Academic Press. New York.

Harmon, Dwight
1984 Personal interview, April 23, Roundup, Montana.

Heffington, Douglas
1983 The 3H site: a proto-historic hunting campsite in southcentral Montana. Journal of Inter-Mountain Archeology II(1).

Historical Research Associates
1982 Historical Cultural Survey of Selected Abandoned Mine Sites in the State of Montana. Missoula, Montana.

Leonard, A. G., C. D. Smith, A. J. Collier, L. H. Woolsey, R. W. Stone, E. G. Woodruff, and W. R. Calvert
1907 Investigations of the Coal Fields of North Dakota and Montana No. 341-A. The U.S. Geological Survey. Government Printing Office, Washington, D. C.

Lynch, James
1982 Personal interview, November 12. Roundup, Montana.

Montana Fish and Game Commission
1975 Montana Historic Preservation Plan with Historic Sites Compendium. Recreation and Parks Division, Montana Department of Fish and Game, Helena.

Morgan, Thomas
1966 "History of Coal Mining in Montana", Proceedings of the First Montana Coal Resources Symposium. Montana Bureau of Mines and Geology, Special Publication 36. Butte, Montana.

Mulloy, William
1954 The McKean site in northeastern Wyoming. Southwestern Journal of Anthropology 10(4):432-460.

1958 A preliminary historical outline for the Northwestern Plains. University of Wyoming Publication 22(1).

Musselshell Valley Historical Museum
1974 Roundup on the Musselshell. Museum Historical Research Committee, Roundup, Montana.

Reeves, B.O.K.
1978 Men, mountains and mammals: a view from the Canadian alpine. Paper presented at the 36th Annual Plains Conference, Denver.

Roundup Record June 12, 1908 to January 3, 1930.

Roundup Record-Tribune January 4, 1930 to December 31, 1959.

Rowe, J.P.
1909 The Roundup Coal Mines of Montana, The Mining World. November 27, 1057-1061.

Schloss, C. M.
1922 Low-Cost Methods Enable Thin-Seam Mine in Montana to Compete with Thick Coal Found in That State, Coal Age. August 24, 275-277.

Swallow, G. C.
1889 Montana State Mine Inspector's Report. Journal Publication Company, Helena, Montana.

Travis, Raymond G. and Louis A. Turnbull
1950 Coal-Mining Methods and Practices and Electric Power Requirements in the Bull Mountain Coal Field, Montana. U.S. Bureau of Mines Report of Investigations 4684. U.S. Department of the Interior, Washington, D. C.

Turner, Scott (editor)
1932 Analyses of Montana Coals. U.S. Bureau of Mines, Technical Paper 529. U.S. Government Printing Office, Washington, D. C.

U.S. Department of the Interior - Bureau of Land Management, Billings, Montana.
n.d. Montana Plat Maps and Historical Indexes for T9N R30E, T8N R25E, T7N R26E, T5N R25E, T8N R26E, T8N R27E, T8N R31.

Waldman, Robert S.
1979 Final technical draft: cultural resource inventory and evaluation in the MONTCO study area, southeast Montana. Cultural Resources Division, Montana Tech Alumni Foundation Mineral Research Center, Butte.

Wetzel, Betty
1983 Coming Home, Montana Magazine. July-August (60):60-63.

Woolsey, L.H., R. W. Richards and C. T. Lupton
1917 The Bull Mountain Coal Field. U.S. Geological Survey Bulletin 647. U.S. Department of the Interior, Washington, D. C.

APPENDIX I:
Site Forms

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number:
24ML182

1.2 Site name/field designation:
Antelope Mine

1.3 County:
Musselshell

1.4 Township/range:

T5N R25E SE 1/4 NW 1/4 NW 1/4 of Section 12

1.5 UTM:

Zone 12 689,420 Easting 5,119,200 Northing

1.6 Site type:

Historic Coal Mine

1.7 Recording status & comments:

recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mines Reclamation Program

1.11 General narrative description of site:

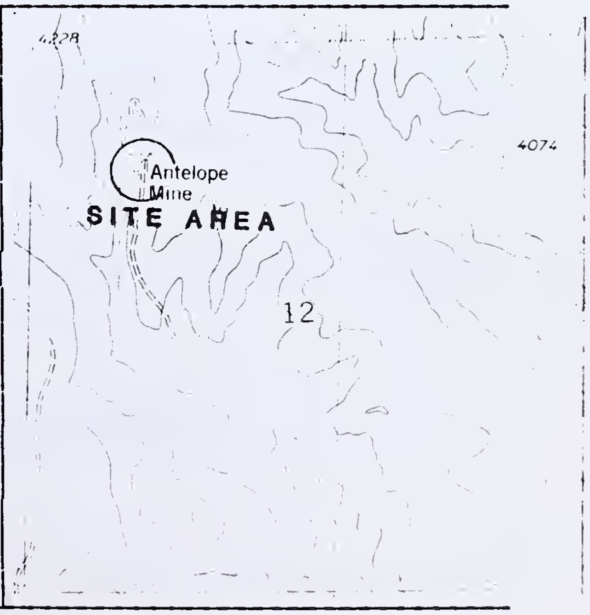
The site is located on the east-facing hillside near the top of a narrow, steep coulee which runs north/south. The area is densely forested and rocky. An eroded gully drops off sharply to the east from the site. Most of the mine facilities remains on the site although the structures are deteriorating. A switch-back road runs from the site on the east side of the coulee to the coulee head to the north.

1.12 Map reference:
Hay Basin NE, Mont. 1979 - 1:24,000

1.13 City/town: [X] vicinity of
Roundup, Montana

1.14 Access to site:

Take U.S. Highway 87 south from Roundup for 13 miles. Turn west onto county road heading west. Travel past the radio tower for 4 miles and then take the road heading south at the west edge of section 1, T5N R25E and travel down the coulee for 1/2 mile to the site.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML182

2.1 Geographic setting:

The site is located within and near the head of a narrow, steep rocky coulee which runs N/S.

2.2 Elevation: 1250 m 4100 ft.

2.3 View/aspect:
restricted in all directions

2.4 Major drainage:

Yellowstone River

2.5 Minor drainage(s):

West Fork Creek

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	none on the site			
b.				

2.7 Regional vegetation:
ponderosa pine trees, Rhus and sagebrush

2.8 Local vegetation:

same as above

2.9 Soils:

2.10 Surface visibility/season of survey:
good/autumn

2.11 Other environmental factors pertaining to site location:

coal seam outcrops in the site area

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML182

3.1 Condition of site:
The site is in fair condition. Most of the mine structures are intact but are deteriorating.

3.2 Site significance (NRHP):

Although the physical integrity of the mine's structure has been impaired, the overall site integrity remains intact within its somewhat unique and picturesque setting. The mine was a significant supplier of coal to the local ranches over a long period of time. The site is recommended as eligible for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the mine adit and either remove or reclaim coal waste areas and remove any hazardous structures.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 11/10/83	3.6 Site recorded by: P. Anderson Date: 11/10/83	3.7 Revisions by: Date:

3.8 Permit No. 83/MT/ND/SD-042

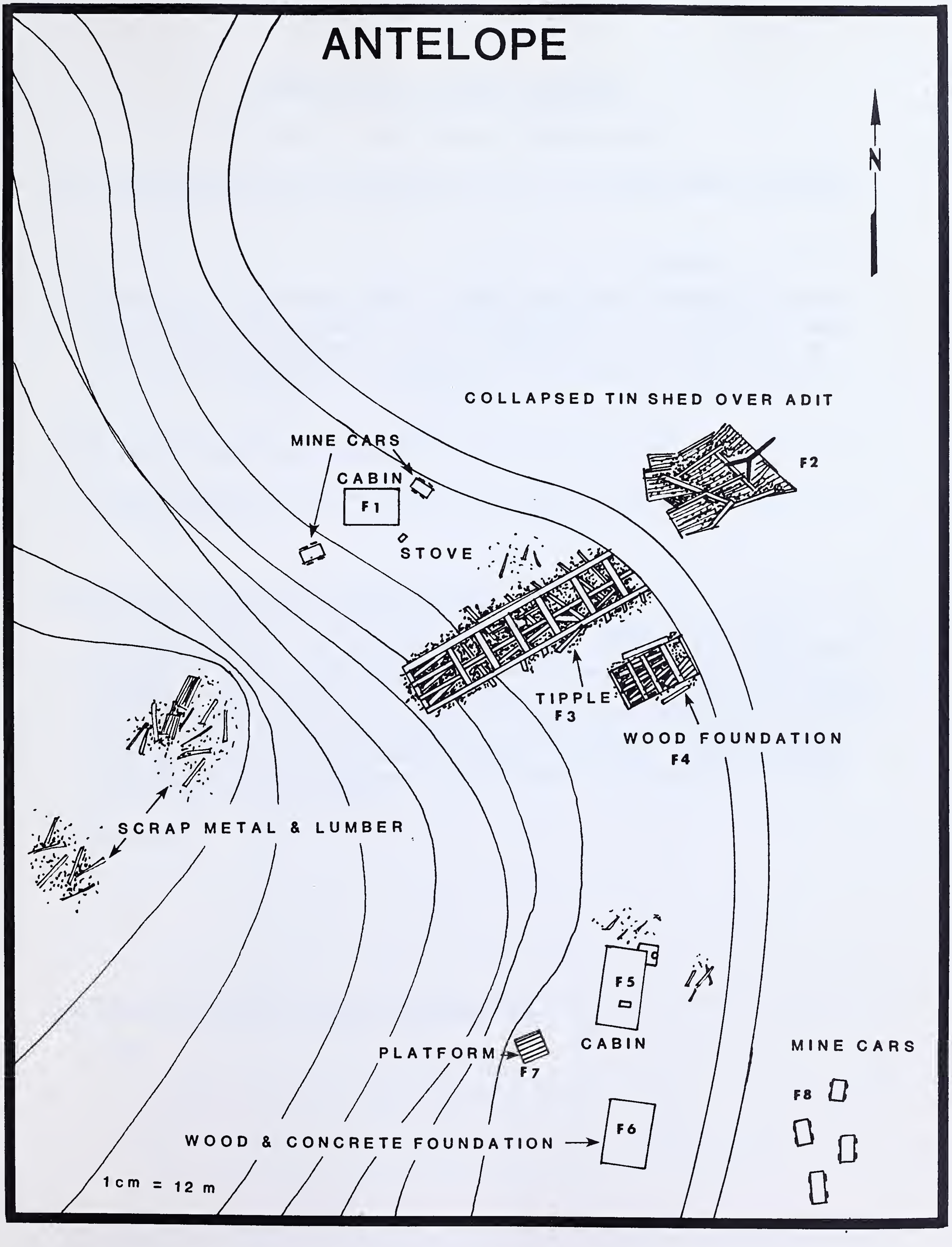
3.9 Publications concerning site:

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Description	View
Rounup proofs III photos #57-64		

ANTELOPE


N
COLLAPSED TIN SHED OVER ADIT
F2
MINE CARS
CABIN
F1
STOVE
TIPPLE
F3
WOOD FOUNDATION
F4
SCRAP METAL & LUMBER
F5
CABIN
MINE CARS
F8
PLATFORM
F7
WOOD & CONCRETE FOUNDATION
F6
1 cm = 12 m

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML182

5.1 Site dimensions, how determined:

36,800 m^2

5.2 Features: 1) 3 x 4 m log cabin, 2) adit portal with collapsed wood and tin entrance shed, 3) partially collapsed 5 x 20 m wood tipple, 4) wood frame which may have been a base for a shed, 5) 3 x 6 m log cabin, 6) 3 x 5 m wood and concrete foundation, 7) wood platform which may have been for an outhouse, 8) six mine cars

5.3 Artifacts (observed, collected):

1) miscellaneous lumber and scrap metal debris, 2) a metal stove near feature #1

5.4 Historical information and evaluation:
The area on which the site is located was first patented to Ivan I. Burford on February 12, 1920 under a homestead entry #734245. Additional land west of the site was acquired by Burford on January 5, 1922 under homestead entry #841041. It is not known if Burford mined on the property although the mine was said to have been established during this period of the early 1920s. The mine operated as a wagon mine furnishing coal to local ranchers and to the domestic market in Billings. The last owner was reported to be [first name unknown] Berns who closed down the mine around 1950 (Carlson 1984).

5.5 References

5.6 Subsurface testing, results, methods, etc.

none

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24ML183	1.2 Site name/field designation: Berten Mine	1.3 County: Musselshell

1.4 Township/range:

T5N	R25E	SW1/4 NW1/4	NW1/4 SW1/4	SW 1/4 of Section 2

1.5 UTM:

Zone 12 687,520 Easting 5,119,850 Northing

1.6 Site type: Historic coal Mine	1.7 Recording status & comments: recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mines Reclamation
Program

1.11 General narrative description of site:

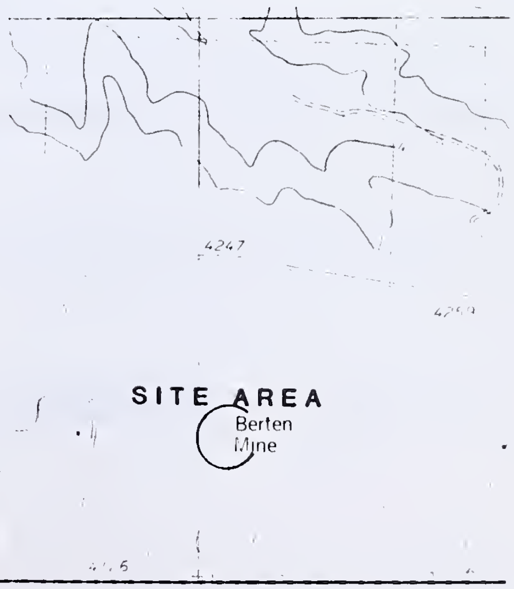
The site is located near the head of a small N/S trending coulee. Adit openings have been driven into the west-facing side of the coulee. Coal waste is at the stream level below the mine adits. A shed and the remains of a scales shed are found on the west side of the coulee.

1.12 Map reference:
Hay Basin NE, Mont. 1979 - 1:24,000

1.13 City/town: ☒ vicinity of
Roundup, Montana

1.14 Access to site:

Take U.S. Highway 87 south from Roundup for 13 miles. Turn west onto county road heading west. Travel past the radio tower for 5 miles to where the head of the coulee is located just south of the road. Walk down the coulee for 500 m to the site.



D116-1

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number:24ML183

2.1 Geographic setting:

The site is located at the head of a small coulee formed by the West Fork of Razor Creek.

2.2 Elevation: 1256 m 4120 ft.

2.3 View/aspect:
restricted in all directions

2.4 Major drainage:

Yellowstone River

2.5 Minor drainage(s):

West Fork of Razor Creek

2.6 Water sources:

Names	Distance	Ele. Change	Type & seasonality

a. The upper section of the West Fork of Razor Creek flows through the site.

b.

2.7 Regional vegetation:
range grasses and ponderosa pine trees

2.8 Local vegetation:
range grasses, Rhuss and ponderosa pine trees

2.9 Soils:
gravelly

2.10 Surface visibility/season of survey:

good/autumn

2.11 Other environmental factors pertaining to site location:

coal seam outcrops in the site area

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML183

3.1 Condition of site: The site is in poor condition with most of the mine structures either collapsed or destroyed.

3.2 Site significance (NRHP):
The physical integrity of the site has been seriously compromised. The site was not an important economic factor in the area nor does it have any great historical interest. The site is not recommended as eligible for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the mine openings and either remove or reclaim the coal waste areas.

3.4 Recommendations:

The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 11/10/83	3.6 Site recorded by: P. Anderson Date: 11/10/83	3.7 Revisions by: Date:

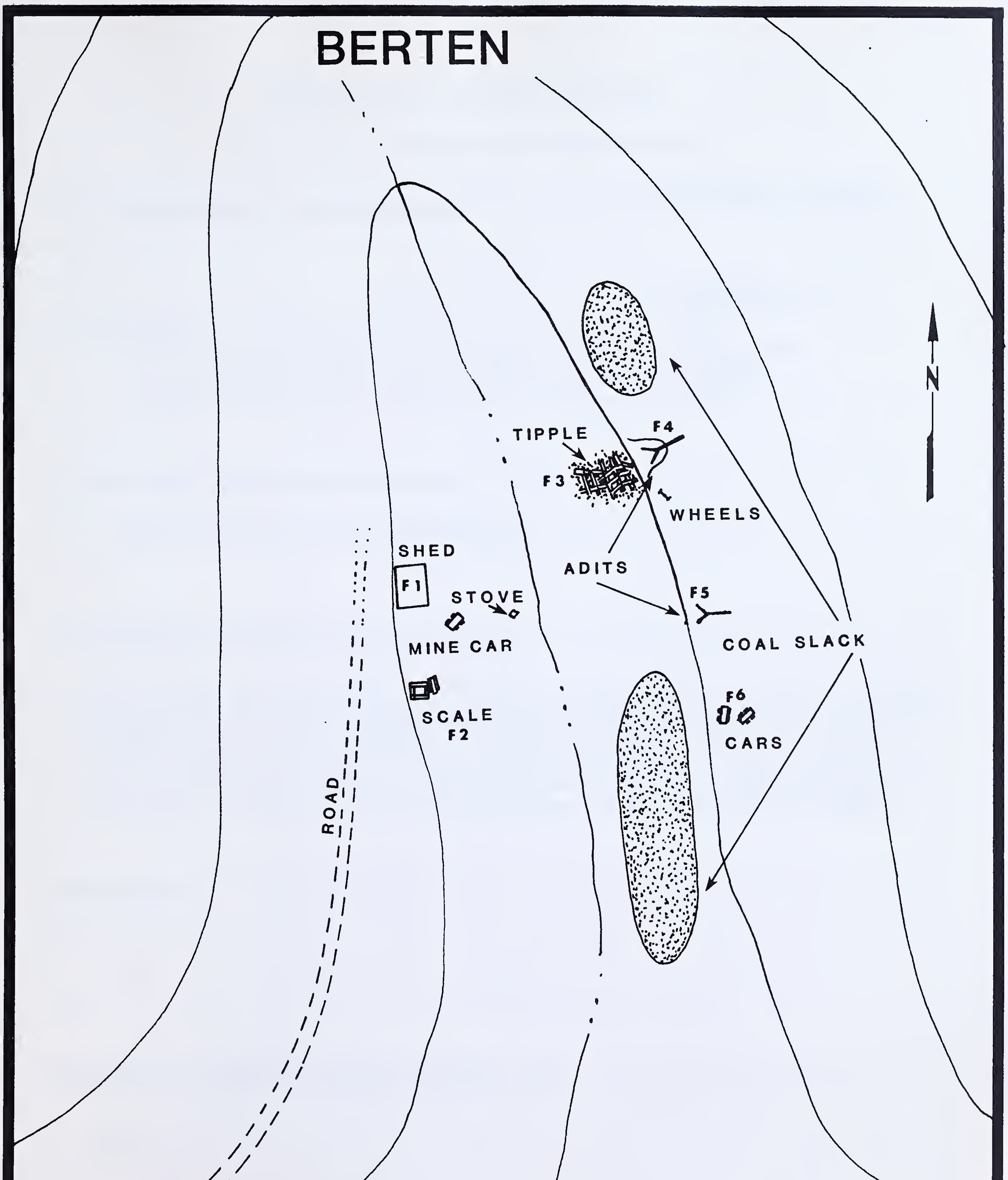
3.8 Permit No. 83-MT/ND/SD-042

3.9 Publications concerning site:

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Description	View
Roundup proofs II photos #53-56		


BERTEN
TIPPLE
F4
F3
WHEELS
ADITS
SHED
F1
STOVE
F5
MINE CAR
COAL SLACK
F6
SCALE
F2
CARS
ROAD
N
1cm = 10m

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML183

5.1 Site dimensions, how determined:

12,000 m^2

5.2 Features:

1) 4 x 6 m wood frame shed, 2) 2 x 4 m foundation for scales,
3) the collapsed remains of a tipple, 4) main adit portal,
5) second adit, 6) four mine cars, 7) coal waste dumps

5.3 Artifacts (observed, collected):

a metal stove and miscellaneous debris

5.4 Historical information and evaluation:

The area on which the site is located was first patented to John P. Neumann on June 23, 1916 under a homestead entry #535140. There is no record of Neumann mining on the property although he probably leased the site area to Ben Berten who opened the mine around 1916 or 1917. The mine operated on an intermittent, small-scale for the next 25 years furnishing coal to the area's ranchers until is closed during World War II (Carlson 1984).

5.5 References

5.6 Subsurface testing, results, methods, etc.

none

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24ML184	1.2 Site name/field designation: Badovinus and Vic Finco MInes	1.3 County: Musselshell

1.4 Township/range:

		SW 1/4	SW 1/4	SE 1/4 of Section 17
T7N	R26E	NW 1/4	NW 1/4	NE 1/4 of Section 20

1.5 UTM:

Zone 12	692,500 692,450	Easting	5,136,100 5,135,850	Northing

1.6 Site type: historic coal mines	1.7 Recording status & comments: recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mines Reclamation
Program

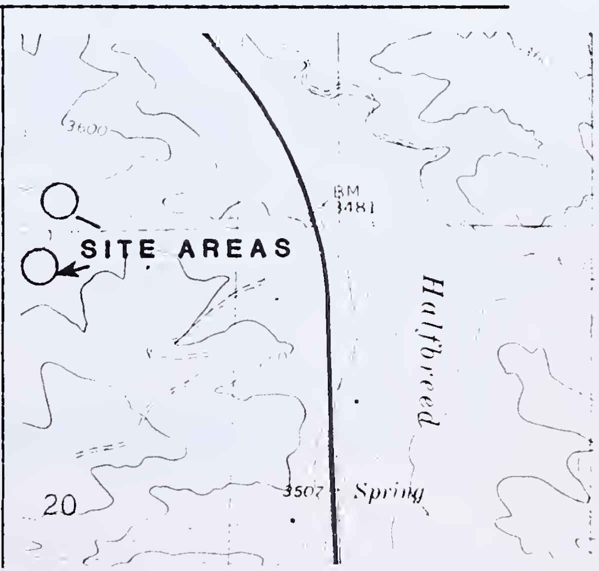
1.11 General narrative description of site:

The site consists of two small wagon mines located on the north side of two branches of a small coulee which runs east into Halfbreed Creek. Little remains of the mines other than coal waste dumps and adit portals.

1.12 Map reference:
Signal Mountain, Mont. 1980 - 1:24,000

1.13 City/town: [X] vicinity of
Roundup, Montana

1.14 Access to site:
Take U.S. Highway 87 south from Roundup for about 6 miles. Turn west onto range road which heads up the coulee. The Badovinus is located at the mouth of the north fork of the coulee while the Vic Finco will be located about 1/4 mile up the south fork.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML184

2.1 Geographic setting:

The sites are located at the mouth of a small E/W trending coulee on the west side of Highway 87. The area lies within the western part of the Bull Mountains. The terrain in this area is characterized by steep, forested hills cut by numerous coulees with occasional sandstone outcrops.

2.2 Elevation: 1079 m 3540 ft.

2.3 View/aspect:
restricted in all directions

2.4 Major drainage:

Musselshell River

2.5 Minor drainage(s):

Halfbreek Creek

2.6 Water sources:

Names	Distance	Ele. Change	Type & seasonality

a. A small intermittent stream runs adjacent to the sites and flows to the east into Halfbreed Creek.
b.

2.7 Regional vegetation:
ponderosa pine forest

2.8 Local vegetation:

range grasses and ponderosa pine trees

2.9 Soils:
gravelly

2.10 Surface visibility/season of survey:

good/autumn

2.11 Other environmental factors pertaining to site location:

The coal seam outcrops in the site areas.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML184

3.1 Condition of site:
The condition of both sites is poor.

3.2 Site significance (NRHP):
The physical integrity of the sites has been destroyed. Neither site is recommended for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:

The Department of State Lands plans to close the open adits and either remove or reclaim the coal waste areas.

3.4 Recommendations:

The sites have been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 11/9/83	3.6 Site recorded by: P. Anderson Date: 11/9/83	3.7 Revisions by: Date:

3.8 Permit No. 83-MT/ND/SD-042

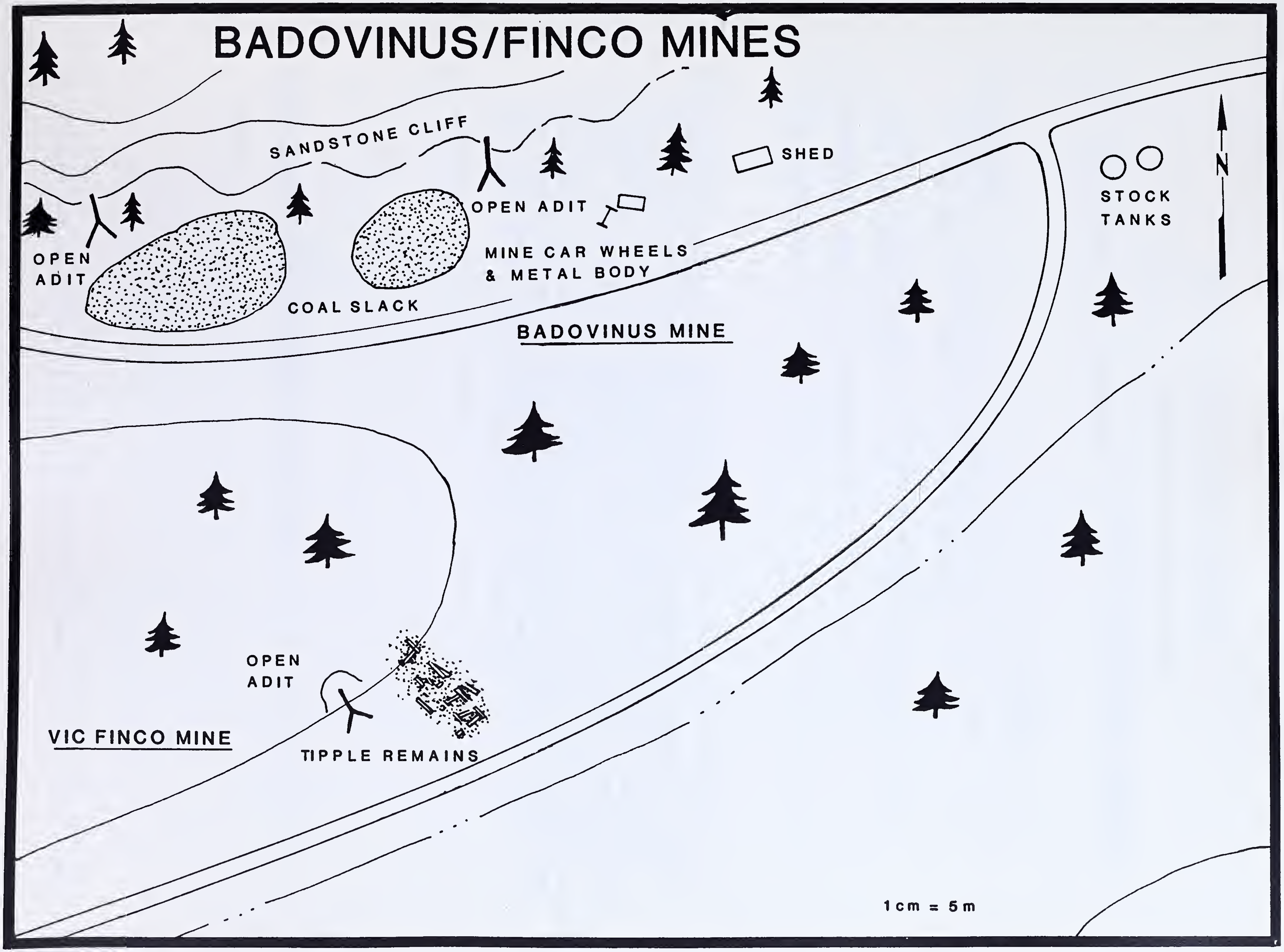
3.9 Publications concerning site:

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Description	View
Roundup proof II photos #65-67		

BADOVINUS/FINCO MINES



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML184

5.1 Site dimensions, how determined:

1700 m^2

5.2 Features:

(Badovinus) 1) two open adit portals, 2) a 2 x 3 m wood shed, 3) mine car body and set of wheels, 4) coal waste dumps

(Finco) 1) open adit portal, 2) wood debris which may be the remains of a small wooden tipple

5.3 Artifacts (observed, collected):

none collected

5.4 Historical information and evaluation:

The area on which the sites are located was patented to Charles F. Smith on October 15, 1930 as a homestead entry (#1041189). There is no record of Smith mining on the property. Both mines were established sometime later. Vic Finco was reported to have put in the first mine shortly before World War II. The mine was driven in for only a short distance when an accidental rock fall killed a miner and the operation was shut down permanently. The Badovinus Mine was started by George Badovinus during the 1960s. The mine reportedly ran for only a year or so and then shut down because of the poor quality of the coal (Carlson 1984; Elasson 1983).

5.5 References

5.6 Subsurface testing, results, methods, etc.

none

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24ML185

1.2 Site name/field designation: Johnny's Mine

1.3 County: Musselshell

1.4 Township/range:

T 7N R 26E NW 1/4 SW 1/4 NE 1/4 of Section 15

1.5 UTM:

Zone 12 695,720 Easting 5,137,200 Northing

1.6 Site type:

Historic coal mine

1.7 Recording status & comments:

recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mines Reclamation
Program

1.11 General narrative description of site:

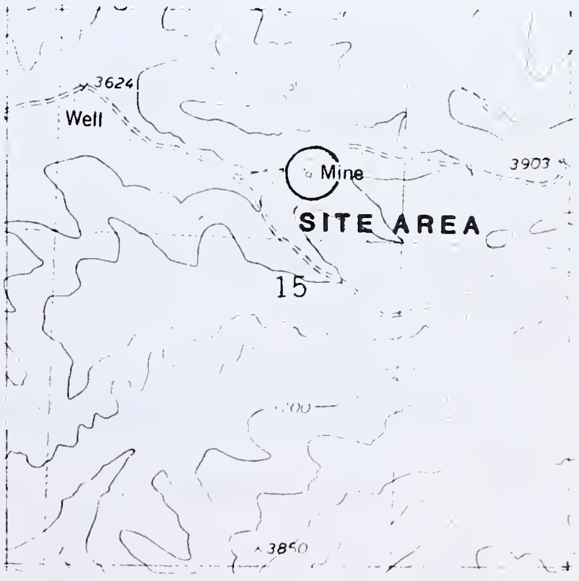
The site is located near the head of a small coulee which runs west into Halfbreed Creek. The site consists of the remnants of a small coal mine at the base of a north-facing hill with coal waste scattered over a large area down the coulee from the mine.

1.12 Map reference:
USGS Signal Mountain, Montana 1980
1:24,000

1.13 City/town: ☒ vicinity of
Roundup, Montana

1.14 Access to site:

Take U.S. Highway 87 south from Roundup for 9 miles. Turn east on the dirt which heads up the small coulee at the center of section 16. Travel east for 1-1/2 miles and then take the north fork of road for 200 m to site.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number:24ML185

2.1 Geographic setting:

2.2 Elevation: 1128 m 3700 ft.

The site is located in hilly, heavily wooded terrain at the western part of the Bull Mountains.

2.3 View/aspect:
restricted in all directions

2.4 Major drainage:
Halfbreed Creek

2.5 Minor drainage(s):
intermittent stream through site

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	intermittent stream through the site area			
b.				

2.7 Regional vegetation:
Eastern Montana ponderosa forest

2.8 Local vegetation:

range grasses and ponderosa pine trees

2.9 Soils:

gravelly

2.10 Surface visibility/season of survey:
good/autumn

2.11 Other environmental factors pertaining to site location:

The site area overlies numerous coal beds of the Bull Mountain coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML185

3.1 Condition of site: The site is in fair condition. Most of the structures on the site are intact although in a deteriorated condition.

3.2 Site significance (NRHP):
The site is less than 50 years old and thus is not yet old enough to be considered for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close any mine openings, remove hazardous structures and either reclaim or remove coal waste dumps.

3.4 Recommendations:

The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 11/10/83	3.6 Site recorded by: P. Anderson Date: 11/10/83	3.7 Revisions by: Date:

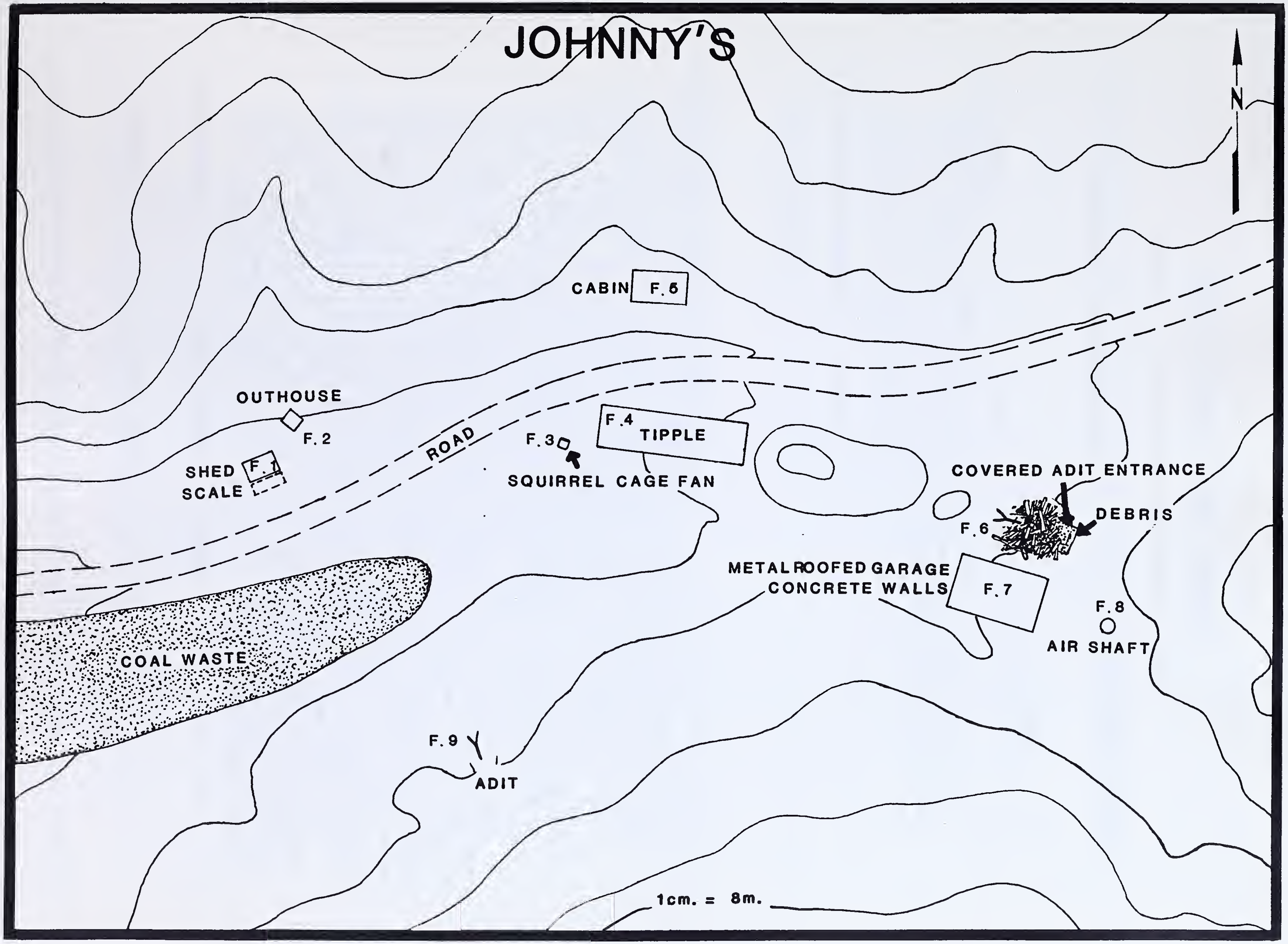
3.8 Permit No. 83-MT/ND/SD-042

3.9 Publications concerning site:
Clawson, Roger, Johnny's Mine is Dead, The Billings Gazette.
October 25, 1970.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Roundup proofs II-III photos #68-74	Description	View


JOHNNY'S
N
CABIN
F. 5
OUTHOUSE
F. 2
SHED
F. 1
SCALE
ROAD
F. 3
SQUIRREL CAGE FAN
F. 4
TIPPLE
COVERED ADIT ENTRANCE
DEBRIS
F. 6
METAL ROOFED GARAGE
CONCRETE WALLS
F. 7
F. 8
AIR SHAFT
COAL WASTE
F. 9
ADIT
1cm. = 8m.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML185

5.1 Site dimensions, how determined:

17,000 m²

5.2 Features:

1) wood shed and scales measuring 2 x 5m and 2 x 6 m, 2) outhouse, 3) squirrel cage-type ventilation fan, 4) wood beam tipple measuring 6 x 15 m, 5) 2 x 5 m log cabin, 6) collapsed shed covering the mine entrance, 7) 8 x 14 m shop/garage with concrete walls and metal roof, 8) air vent, 9) second mine adit

5.3 Artifacts (observed, collected):

none collected

5.4 Historical information and evaluation:

The Johnny's Mine was first developed around 1950 by Cross and Carl Rux who leased the property from Johnny Koesky. Originally the land was first patented to the Northern Pacific Railroad on June 2, 1907 (Pat. #136). Koesky then took over the mine in 1953 and ran it on a year-around basis employing two or three miners to assist him. The mine produced coal for the local domestic market for 17 years but then ran into new Federal regulations which ultimately forced the mine to close. Prior to 1970 the Federal Bureau of Mines had made the distinction between gaseous and non-gaseous mines. The Bull Mountain mines were classed as non-gaseous and thus required less stringent ventilation and other safety measures than were required for gaseous mines. When the new Federal Coal Mine Health and Safety Act was passed this distinction was erased. The law was designed to protect miners in gaseous coal mines, predominantly located in the eastern part of the country, but the law had the unfortunate side-effect of temporarily closing all underground coal mines in Montana. Many of the smaller operations such as Johnny Koesky's mine were unable to afford the new equipment needed to meet the new Federal regulations and were forced to close. The Johnny's Mine closed in the summer of 1970, which left only the Blue Flame, Divide, Western Coal and the Square Deal still operating in the Bull Mountain area and all of these would close within a few years (Clawson 1970; Cross 1984).

5.5 References (see section 3.9 of this form)

5.6 Subsurface testing, results, methods, etc.

none

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24ML186	1.2 Site name/field designation: Western (Gantar) Mine	1.3 County: Musselshell

1.4 Township/range:

T 7N R 26E NW 1/4 SE 1/4 SW 1/4 of Section 4

1.5 UTM:

Zone 12 693,820 Easting 5,139,620 Northing

1.6 Site type: Historic Coal Mine	1.7 Recording status & comments: recorded, mapped and photographed

1.8 Administrative/surface ownership:	1.9 Mineral ownership:
	1.10 Project name: Department of State Lands Abandoned Mines Reclamation Program

1.11 General narrative description of site:

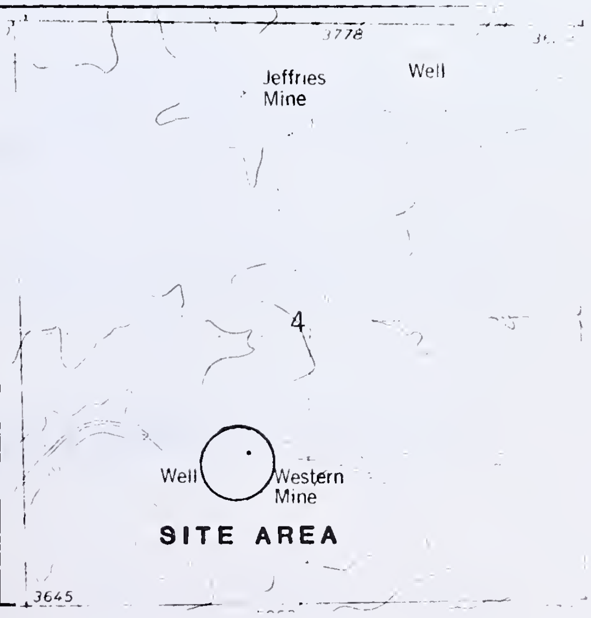
The mine is located near the head of a small west-flowing coulee. The mining facilities are still intact and are on the south side of the coulee with the adit being driven into the base of the hillside in a southeasterly direction.

1.12 Map reference:
USGS Gage, Mont. 1979 - 1:24,000

1.13 City/town: ☒ vicinity of
Roundup, Montana

1.14 Access to site:

Take U.S. Highway 87 south from Roundup for 5 miles. Turn east onto the dirt road up the coulee which runs through the north part of section 8. Travel for 1-1/2 miles to the site.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML186

2.1 Geographic setting:

2.2 Elevation: 1109 m 3640 ft.

The site is located with a narrow coulee which runs E/W from the east side of Halfbreed Creek. The area is within the Bull Mountains and is characterized by rugged, hilly country with numerous sandstone outcrops and dense stands of pine trees.

2.3 View/aspect:
restricted in all directions

2.4 Major drainage:
Musselshell River

2.5 Minor drainage(s):
Halfbreed Creek

2.6 Water sources:

Names Distance Ele. Change Type & seasonality

a. small intermittent stream which flows west into Halfbreed Creek

b.

2.7 Regional vegetation:

ponderosa pine forest

2.8 Local vegetation:
range grasses and ponderosa pine tress

2.9 Soils:
gravelly

2.10 Surface visibility/season of survey:
good/autumn

2.11 Other environmental factors pertaining to site location:
The area overlies the Bull Mountain coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML186

3.1 Condition of site:
The site is generally in fair to good contion.

3.2 Site significance (NRHP):
The physical integrity of the site is intact. The mine represents a type of small mining operation which was prevalent in the Bull Mountains and was a significant economic factor in the area. The site is recommended as eligible for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the mine adit, either remove or reclaim the coal waste areas and remove any hazardous structures.

3.4 Recommendations:

The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson	3.6 Site recorded by: P. Anderson	3.7 Revisions by:
Date: 11/10/83	Date: 11/10/83	Date:

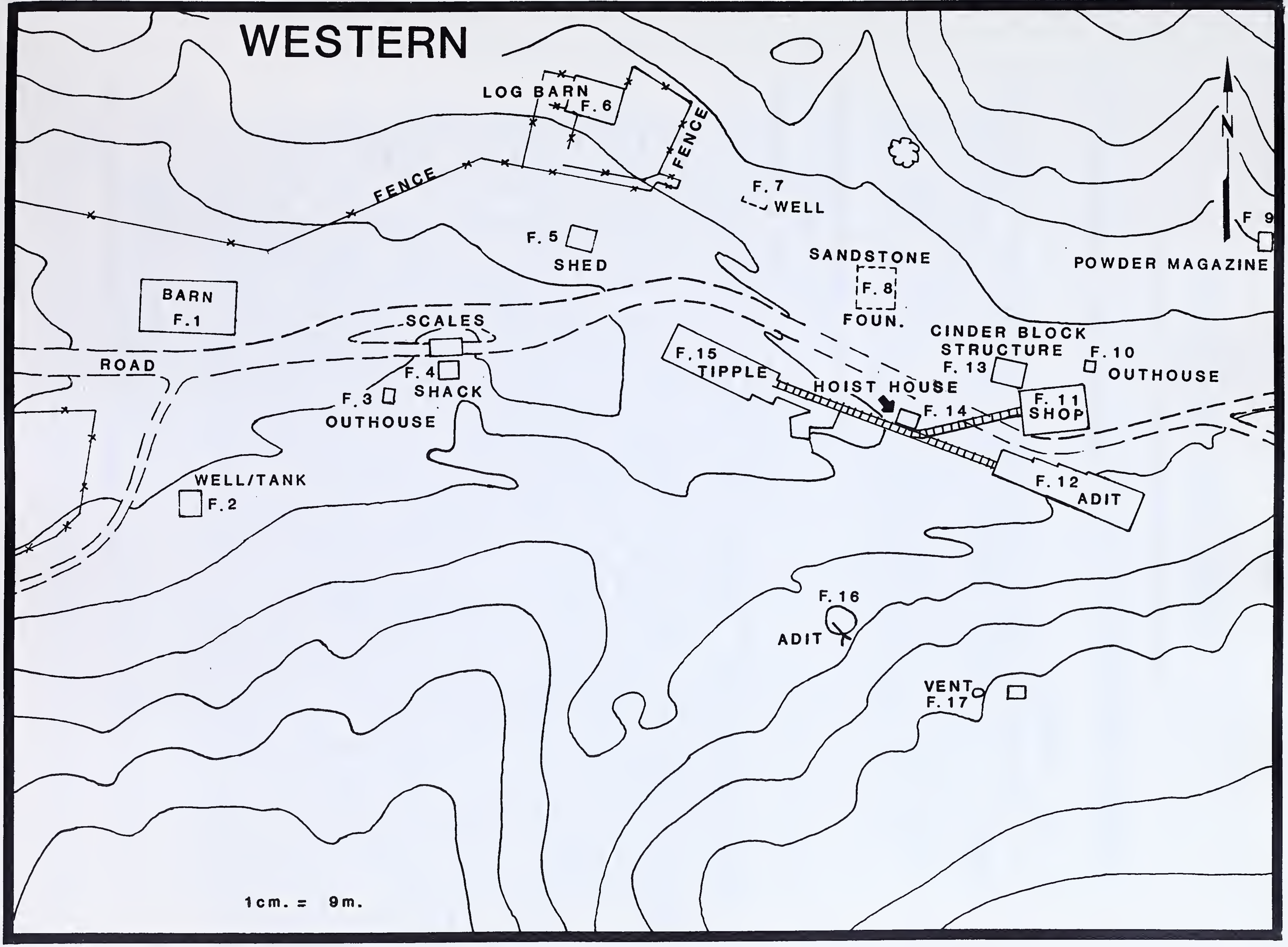
3.8 Permit No. 83-MT/ND/SD-042

3.9 Publications concerning site: Travis, Raymond G. and Louis A. Turnbull, Coal-Mining Methods and Practices and Electric Power Requirements in the Bull Mountain Coal Field, Montana. Bureau of Mines Report of Investigations 4684, April, 1950. Cebull, Rudolph J., History of Coal Mining in Musselshell County, Roundup Record-Tribune. April 3, 1958. Turner, Scott (ed.), Analyses of Montana Coals. U.S. Department of Commerce Bureau of Mines Technical Paper 529, U.S. Government Printing Office, Washington, D.C., 1932.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Description	View
Roundup proof III photos #75-87		


WESTERN
LOG BARN
F. 6
FENCE
FENCE
F. 7
WELL
N
F 9
POWDER MAGAZINE
F. 5
SHED
SANDSTONE
F. 8
FOUN.
BARN
F. 1
SCALES
ROAD
F. 4
SHACK
F. 3
OUTHOUSE
F. 15
TIPPLE
HOIST HOUSE
CINDER BLOCK
STRUCTURE
F. 13
F. 10
OUTHOUSE
F. 14
F. 11
SHOP
F. 12
ADIT
WELL/TANK
F. 2
F. 16
ADIT
VENT
F. 17
1cm. = 9m.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML186

5.1 Site dimensions, how determined:

29,000 m^2

5.2 Features: 1) 9 x 18 m wood shed-type barn, 2) well and water tank, 3) outhouse, 4) 1.5 x 2.5 m shack with asphalt siding, 5) 2.5 x 3 m shed, 6) 7 x 10 m log barn, 7) well, 8) 7.5 x 7.5 m sandstone foundation, 9) 3 x 4 m powder magazine, 10) outhouse, 11) 7.5 x 11 m wood garage, 12) adit portal, 13) 4.6 x 7 m cinder block shop, 14) 2.5 x 3 m cable hoist shed, 15) 7 x 36 m wood tipple, 16) prospect adit, 17) air vent, 18) large coal waste dumps located down the coulee to the west of the mine.

5.3 Artifacts (observed, collected):
miscellaneous debris

5.4 Historical information and evaluation:
The land on which the site is located was first patented to Luka Gantar on June 28, 1918 under a homestead entry (#638889). Gantar owned and operated the mine until the mid-1940s and it was frequently called the Gantar Mine. The operation was one of the longest-running mines in the Bull Mountains and was one of the last to close during the early 1970s. The operation was drift mine using a room and pillar method. A shortwall cutting machine was used to undercut the coal and the seams were shot down with black blasting powder. Power for the mine came from a gasoline engine-driven generator on the mine site. The mine generally operated on a seasonal basis with daily production averaging about 50 tons and employed about seven or eight men. In 1947 the yearly production was 4000 tons. There was no railroad connection to the mine although the high-quality subituminous coal found a steady market as a local domestic fuel (Cebull 1958; Clawson 1970; Travis and Turnbull 1950; Turner 1932). In 1944 Gantar sold out to Harley Klinger, George Badovinus and Henry Gerring who ran the mine until the early 1950s when Glen Johnson took it over. Johnson then ran it until it closed in the 1970s (although it was reported the mine continued to operate on the sly for some years after it was officially closed) (Cross 1984). After the mine closed it had a brief revival as a mushroom farm. Glen Johnson had experiemented with growing mushrooms in his mine (24ML) during the 1950s but was unable to find a steady market. In the spring of 1972 Johnson tried again and successfully grew the delicate fungus in the Western Mine workings where the temperature and humidity were ideal for mushroom cultivation (Chadwick 1973). Following the period as a mushroom farm the mine served as a public fallout shelter although its safety as a fallout shelter was somewhat questionable since a second sign a few meters inside the entrance portal states: "Fan not working. Black Damp (CO^2) present. Death could be instantaneous."

5.5 References
(see section 3.9 of this report)

5.6 Subsurface testing, results, methods, etc.
none

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24ML187	1.2 Site name/field designation: Jeffries Section 4 Mine	1.3 County: Musselshell

1.4 Township/range:

T 7N R 26E NE 1/4 NE 1/4 NW 1/4 of Section 4

1.5 UTM:

Zone 12 693,800 Easting 5,140,700 Northing

1.6 Site type:

Historic Coal Mine

1.7 Recording status & comments:

recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mines Reclamation
Program

1.11 General narrative description of site:

The site consists mostly of coal waste dumps located between hills which open to the north to a high rangeland. Forested hills rise to the south, east and west of the site. A small reservoir is at the north end of the site.

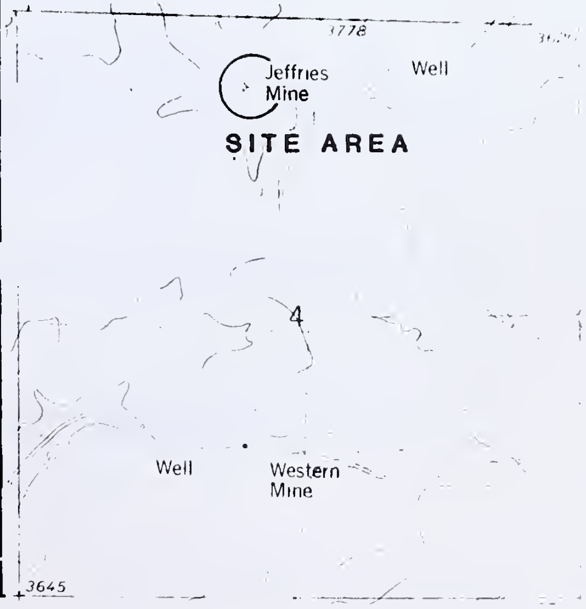
1.12 Map reference:
USGS Gage, Mont. 1979 - 1:24,000

1.13 City/town:
Roundup, Montana

☒ vicinity of

1.14 Access to site:

Take U.S. Highway 87 south from Roundup for 5 miles. Turn east on dirt road heading up small coulee 1-1/2 mile to Western Mine. Continue past mine for 1/2 mile then road heads NW and north for another 1/2 mile to Jeffries Mine.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML187

2.1 Geographic setting:

2.2 Elevation: 1109 m 3640 ft.

The site is located in the central Bull Mountains and is characterized by areas of open rangeland surrounded by low, forested hills.

2.3 View/aspect:
open to north - restricted in all other directions

2.4 Major drainage:
Musselshell River

2.5 Minor drainage(s):
Barrigan Coulee

2.6 Water sources:

Names	Distance	Ele. Change	Type & seasonality

a. site is located on an intermittent stream which is an upper tributary of Barrigan Coulee creek.
b.

2.7 Regional vegetation:
range grasses and ponderosa pine trees

2.8 Local vegetation:
range grasses, Rhus, sagebrush and ponderosa pine trees

2.9 Soils:
gravelly

2.10 Surface visibility/season of survey:

good/auturmn

2.11 Other environmental factors pertaining to site location:

The site area overlies the Bull Mountain Coal Field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML187

3.1 Condition of site:
The site has been virtually destroyed with little remaining except coal waste dumps.

3.2 Site significance (NRHP):

The physical integrity of the site has been destroyed. The site is not recommended as eligible for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close mine openings and either remove or reclaim the coal waste areas.

3.4 Recommendations:

The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson	3.6 Site recorded by: P. Anderson	3.7 Revisions by:
Date: 11/11/83	Date: 11/11/83	Date:

3.8 Permit No. 83-MT/ND/SD-042

3.9 Publications concerning site: Travis, Raymond G. and Louis A. Turnbull, Coal-Mining Methods and Practices and Electric Power Requirements in the Bull Mountain Coal Field, Montana. U.S. Bureau of Mines, Report of Investigations 4684, April, 1950.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Description	View
Roundup proof V photos #96, 97		

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML187

5.1 Site dimensions, how determined:

39,000 m^2

5.2 Features:

1) a 2.5 x 7 m sandstone foundation, 2) an adit portal, 3) waste dumps

5.3 Artifacts (observed, collected):

1) metal ovens inside the sandstone foundation, 2) a scatter of bricks and metal debris

5.4 Historical information and evaluation:

The area on which the site is located was originally patented to Josef Matkovich on September 26, 1917 as a homestead entry (#601723). There is no evidence indicating that Matkovich ever mined coal in this area. There was a small mine on the site during this period which was called the Lazy Joe which was later sold to Johnny Carlson and became the Carlson Mine. Carlson then sold out in 1945 to the Jeffries Coal Mining Company which was owned by G.J. Jeffries. The remnants which currently are found on the site date from the Jeffries operation. The Jeffries Section 4 Mine was just one of a number of mines operated by the company in the Bull Mountains. In 1916 the company opened its first mine on Horse Thief Creek which it operated for 12 years. when the coal seam was worked out in this area the company transferred its operations to the M. and M. property just east of Roundup in 1928 (see Jeffries Section 18 Mine of this report). The company also operated the Independent Mine west of Roundup which operated from 1918 into the early 1920s (Cebull 1958; Roundup Record August 30, 1918 and August 6, 1920. The Jeffries Section 4 Mine started in 1945 and operated until the early 1950s. It was a relatively extensive operation although this is difficult to visualize from the current side condition. In 1947 total production was 47,500 tons with a daily average of 360 tons which was produced by 52 men. The main opening was a drift driven into the coal bed from the outcrop while 1000 feet from the portal (continued)

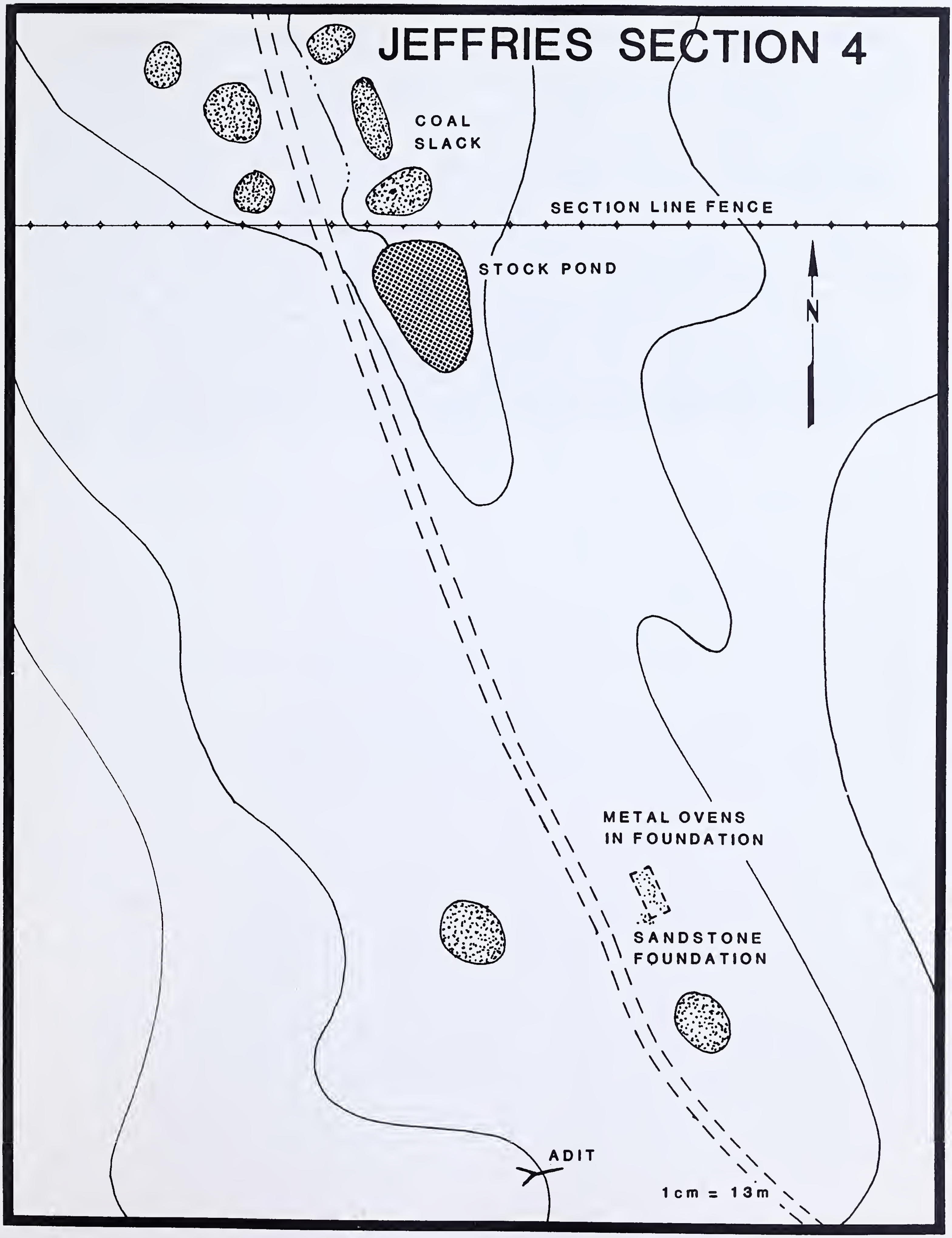
5.5 References

(see section 3.9 of this form)

5.6 Subsurface testing, results, methods, etc.

none

JEFFRIES SECTION 4



a rock slope was driven as a ventilation course. Air was supplied by a 4-1/2 foot fan driven by a 10-horse electric motor. The mine was dry so no pumping was required. The standard room and pillar system was used. A track-mounted cutting machine cut into a 2-inch parting (layer of shale between the seams) and then the lower 20 inch and upper 50 inch seams were mined. The mine faces were shot down with electrically fired Cardox on the night shift. The cars were then hand loaded and hauled by horses or mules to a point where they were hauled to the surface by a 5-ton locomotive powered by storage-battery. Six cars of 3-1/4 ton capacity each were taken each trip. One of the reasons there is so little remaining on the site from the mining operation is because the surface facilities were never very extensive. The tipple was located five miles north on the railroad and the coal was hauled by four gasoline-powered trucks of 8-1/2 tons capacity from the mine to the tipple where the coal was screened and loaded directly on the railroad. One quarter of the mine's production was consigned to a sugar refinery in northeast Montana while the rest went to coal dealers in Montana and North Dakota for domestic use. In addition, occasional shipments of stoker coal were delivered to the railroad (Travis and Turnbull 1950; Cross 1984; Harmon 1984).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24ML188

1.2 Site name/field designation: Carlson Mine

1.3 County: Musselshell

1.4 Township/range:

T 8N R 26E SW 1/4 SE 1/4 NW 1/4 of Section 29

1.5 UTM:

Zone 12 701,200 Easting 5,143,650 Northing

1.6 Site type: Historic Coal Mine

1.7 Recording status & comments: recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mines Reclamation
Program

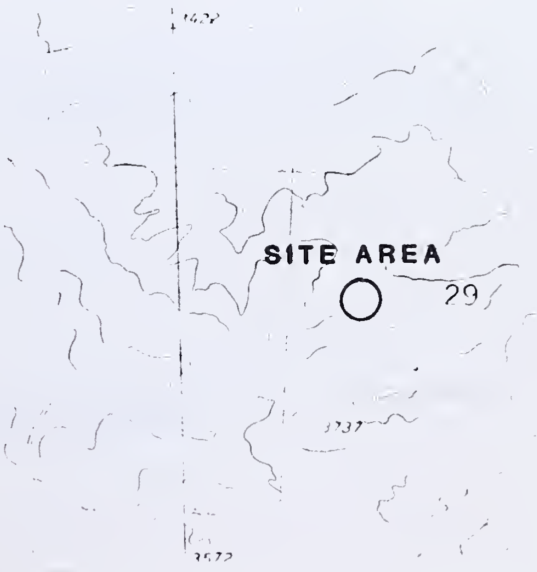
1.11 General narrative description of site:

The site consists of an adit portal, a coal waste dump, a small concrete foundation and a possible mine air vent located near the head of a small E/W trending coulee which runs into East Parrot Creek. The adit portal is at the base of the sandstone outcrop which runs along the rim of the coulee.

1.12 Map reference:
USGS Gage, Mont. 1979 - 1:24,000

1.13 City/town: ☒ vicinity of
Gage, Montana

1.14 Access to site:
Take U.S. Highway 12 east from Roundup about 7 miles to Gate. Take the county road south from Gage about 5 miles to the ranch on the east side of the road in section 29. The site is west of the ranch house up the coulee 800 m on the south side.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML188

2.1 Geographic setting:

2.2 Elevation: 1055 m 3460 ft.

The site is located in a small coulee within the hilly ponderosa pine forest of the Bull Mountains.

2.3 View/aspect:
restricted in all directions

2.4 Major drainage:
Musselshell River

2.5 Minor drainage(s):
East Parrot Creek

2.6 Water sources:

Names	Distance	Ele. Change	Type & seasonality

a. East Parrot Creek - 800 m east of the site

b.

2.7 Regional vegetation:
range grasses and ponderosa pine trees

2.8 Local vegetation:
(same as above)

2.9 Soils:
rocky

2.10 Surface visibility/season of survey:
good/autumn

2.11 Other environmental factors pertaining to site location:

coal seam outcrops in the site area

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML188

3.1 Condition of site:
The physical evidence from the mining operation has been virtually eradicated.

3.2 Site significance (NRHP):

The physical integrity of the site has been destroyed. The site is not recommended as eligible for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:

The Department of State Lands plans to close the mine opening and either remove or reclaim the coal waste dumps.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 11/9/83	3.6 Site recorded by: P. Anderson Date: 11/9/83	3.7 Revisions by: Date:

3.8 Permit No. 83-MT/ND/SD-042

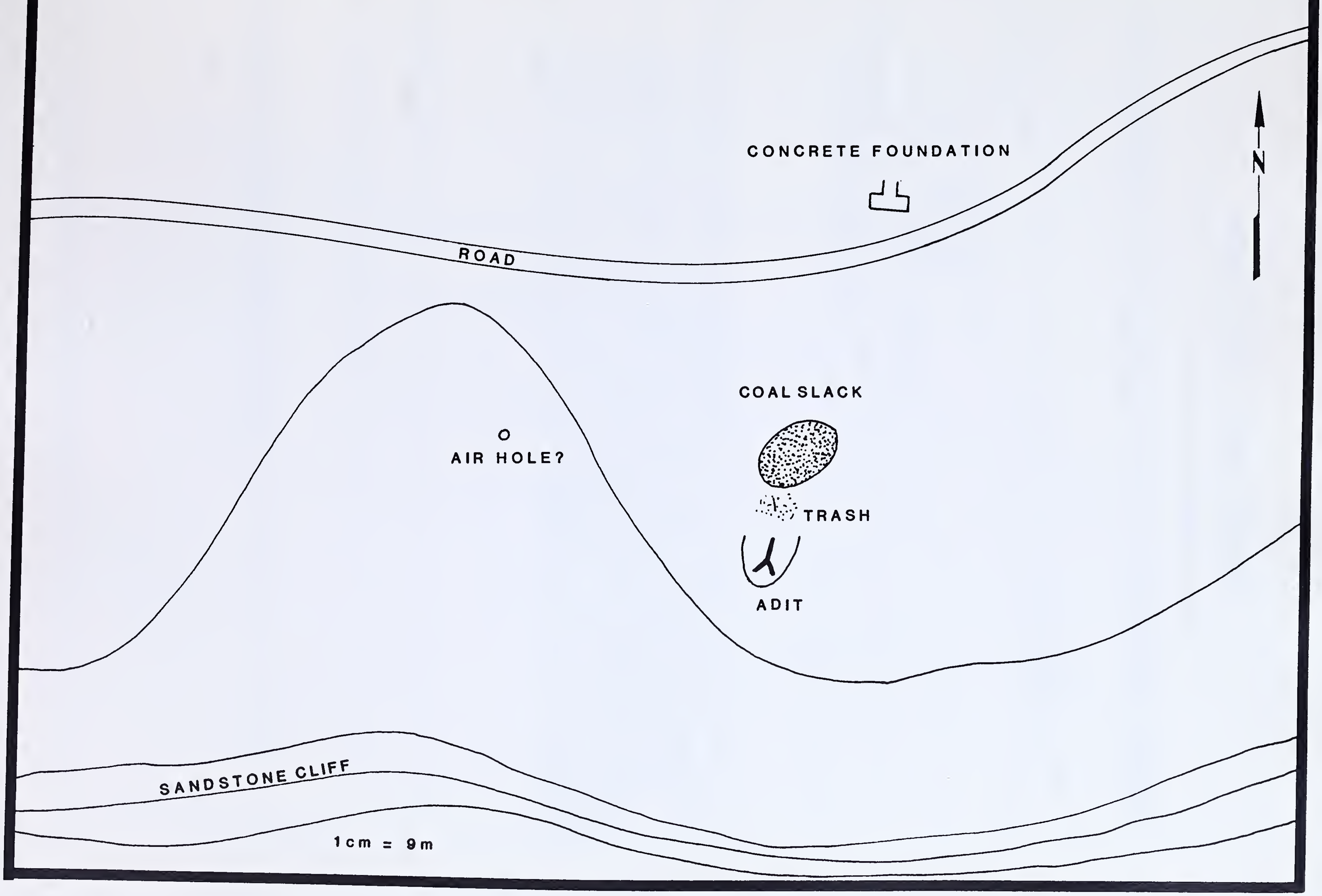
3.9 Publications concerning site:
Cebull, Rudolph J., History of Coal Mining in Musselshell County, Roundup Record-Tribune. April 3, 1958.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Description	View
Roundup proofs I photos #41 and 42		

CARLSON


CONCRETE FOUNDATION
N
ROAD
COAL SLACK
AIR HOLE?
TRASH
ADIT
SANDSTONE CLIFF
1cm = 9m

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML188

5.1 Site dimensions, how determined:

6300 m^2

5.2 Features:

1. the mine entrance portal
2. a coal slack dump
3. a possible mine air vent
4. 1.8 x 4 m concrete foundation

5.3 Artifacts (observed, collected):
miscellaneous metal debris

5.4 Historical information and evaluation:
Little information was available on this site. The land was originally a railroad grant to the Northern Pacific Railroad Company (patent #2) granted on November 18, 1895. The only reference to the site was one informant's recollection that the mine may have been established briefly during the 1930s by Johnny Carlson who also ran a small mine at the site of the Jeffries Section 4 Mine. The mine appears to have been in operation for only a short period and probably furnished coal to local ranchers for domestic use (Carlson 1984).

5.5 References

(see section 3.9 of this form)

5.6 Subsurface testing, results, methods, etc.

none

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number:
24ML189

1.2 Site name/field designation:
Keene No. 1 Mine

1.3 County:
Musselshell

1.4 Township/range:

T 8N R 25E SW 1/4 & NW 1/4 NE 1/4 of Section 28

1.5 UTM:

Zone 12 684,600 Easting 5,143,500 Northing

1.6 Site type:

Historic Coal Mine

1.7 Recording status & comments:

recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mines Reclamation
Program

1.11 General narrative description of site:

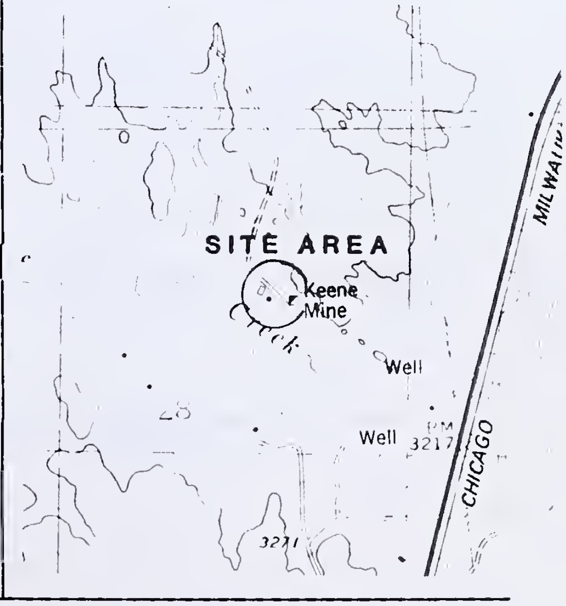
The site is now part of a farm on the north bench of Horse Thief Creek coulee. The entrance to the mine is located up a small side drainage which runs to the north. Slack dumps are found in front of the entrance and the remains of a tipple foundation are located at the east end of the site. The only structure from the mine remaining on the site are the farm house which originally was the mine office and the barn which originally was the mine shower/locker building.

1.12 Map reference:
USGS Roundup, Monta. 1979 - 1:24,000

1.13 City/town: ☒ vicinity of
Roundup, Montana

1.14 Access to site:

Take U.S. Highway 12 south from Roundup for about 2-1/2 miles. Take the county road heading west for 1/4 mile to the site area.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML189

2.1 Geographic setting:

2.2 Elevation: 994 m 3260 ft.

The site is located on a low bench which forms the northern edge of Horse Thief Creek coulee. The surrounding area consists of wooded low rolling hill country.

2.3 View/aspect:

open to the west and south - restricted to the north and east

2.4 Major drainage:
Horse Thief Creek and the
Musselshell River

2.5 Minor drainage(s):

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	Horse Thief Creek - 200 m south			
b.				

2.7 Regional vegetation:
ponderosa pine forest

2.8 Local vegetation:

range grasses, Rhus, sagebrush and ponderosa pine trees

2.9 Soils:

rocky and gravelly

2.10 Surface visibility/season of survey:

good/autumn

2.11 Other environmental factors pertaining to site location:

coal seam outcrops at this location

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML189

3.1 Condition of site:
The site integrity has been practically destroyed

3.2 Site significance (NRHP):

Little remains on the site from the mining operation even though the Keene Mine was one of the larger coal mines in the area. Only two structures remain from the mining operation and both have been modified to a degree where their original function is no longer discernible. Since the basic site integrity no longer exists the site is not recommended as eligible for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the adit opening and either remove or reclaim the coal waste dumps. Neither of the two remaining structures will be impacted.

3.4 Recommendations:

The site has been examined, recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 11/8/83	3.6 Site recorded by: P. Anderson Date: 11/8/83	3.7 Revisions by: Date:

3.8 Permit No. 83-MT/ND/SD-042

3.9 Publications concerning site:
Schloss, C.M., Low-Cost Methods Enable Thin-Seam Mine in Montana to Compete with Thick Coal Found in That State, Coal Age. August 24, 1922, pp. 275-277.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Description	View
Roundup proofs I - photos 1-15		

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML189

5.1 Site dimensions, how determined:

33,800 m^2

5.2 Features:

1. mine entrance portal
2. coal waste dumps
3. concrete foundations for a tipple
4. large metal pipe
5. mine office building (currently a farm house)
6. mine showers/lockers building ("dry") (currently a barn)

5.3 Artifacts (observed, collected):

none

5.4 Historical information and evaluation:

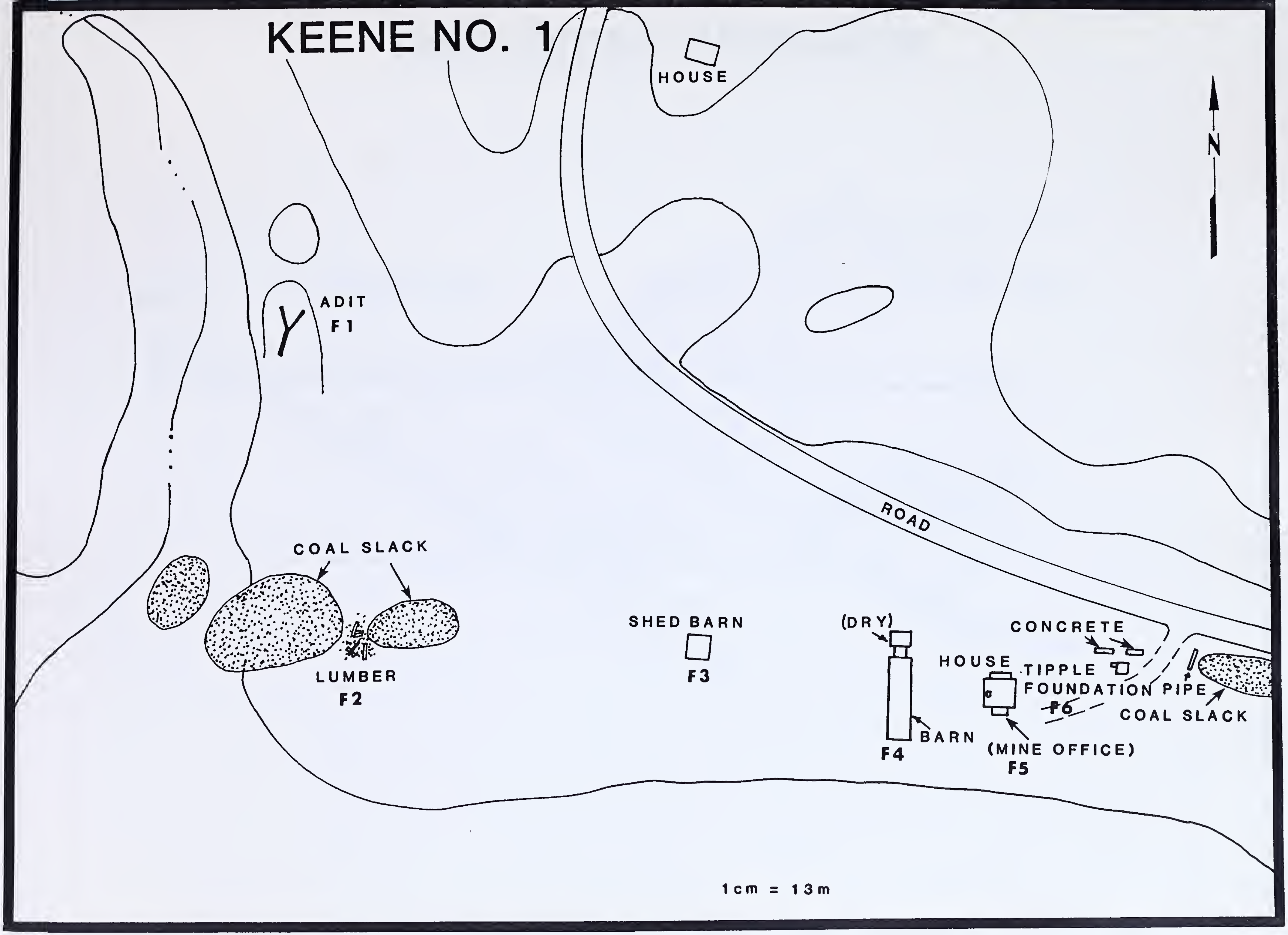
When the Chicago, Milwaukee and St. Paul Railroad entered the Roundup area in 1908 their agent, William A. Keene, was preparing the grade through Roundup. In the process he discovered a workable coal seam on Horsethief Creek. He acquired a cash entry patent (#327588) for the property on April 22, 1913 although he had started the mine in 1910. The articles of incorporation at the Keene Coal Mining Company were filed in June, 1910 with a capital stock of $250,000. Development work on the mine had already been undertaken with a slope entrance being driven 500 feet into the coal seam. The company had also secured a lease of the right-of-way for a railroad spur to the mine which the railroad promised to build as soon as the mine output reached 100 tons a day (Cebull 1958; Roundup Record June 24, 1910). (continued)

5.5 References

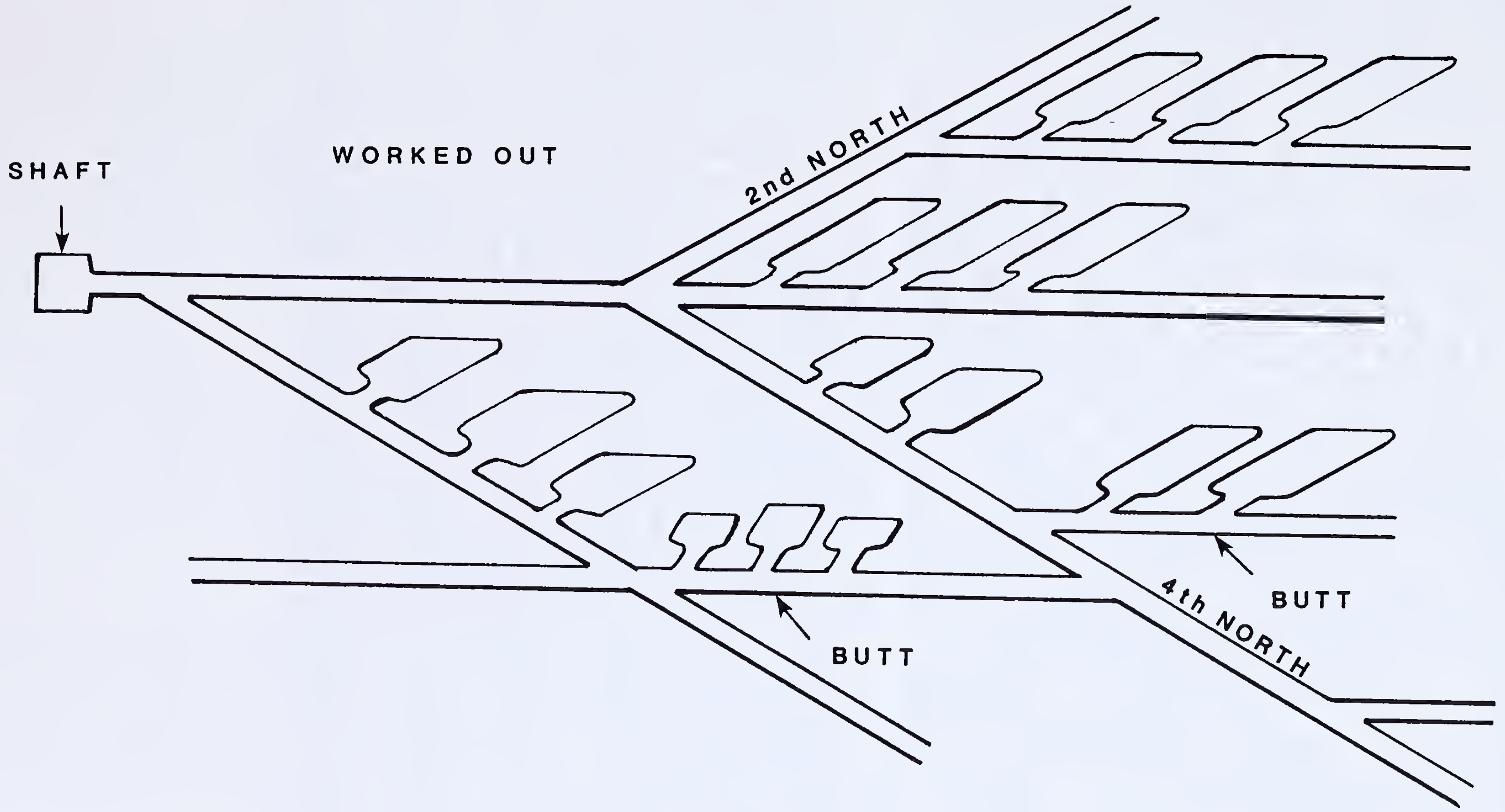
(see section 3.9 of this form)

5.6 Subsurface testing, results, methods, etc.

none


KEENE NO. 1
HOUSE
N
ADIT
F1
ROAD
COAL SLACK
LUMBER
F2
SHED BARN
F3
(DRY)
BARN
F4
CONCRETE
HOUSE
TIPPLE
FOUNDATION
F6
PIPE
COAL SLACK
(MINE OFFICE)
F5
1cm = 13m

1922 KEENE WORKINGS



In October of 1910 the railroad spur was built and a couple weeks later the Keene shipped its first coal. At this point the mine appeared to be on its way to becoming a major operation. The mine working had a sandstone roof and little timbering was needed and no water problems were encountered (Roundup Record May 14, 1909, October 21 and November 4, 1911). In spite of this promising beginning, the mine went through a checkered career for the next decade. In September, 1911 the Nelson Brothers who were major coal operators in the Sand Coulee area, acquired controlling interest in the Keene Coal Mining Company. The mine, up to this point, had not been very successful and it was felt that the new management would revive the operation (Roundup Record September 1, 1911). However, in March, 1912 the mine was acquired by the Stillwater Coal Mining Company (Roundup Record March 29, 1912). The new owners were said to be planning to equip the mine with the latest mining machinery but apparently little was done and the holdings were then sold to the Carbon Mine Company of Delaware in April, 1915. A few months later the Keene Coal Mining Company and the Pine Creek Coal Company attempted to merge and following this there was an attempt to sell the property to a W. W. Conklin of St. Paul. During the next three years W. J. Dugan and George J. McCleary attempted to get the mine into steady production but apparently were only able to reopen the mine on an intermittent basis (Roundup Record April 23, June 4, August 27, 1915; November 17, December 8, 1916; December 28, 1917; March 14, November 14, 1919).

In 1920 the mine finally became a steady and profitable enterprise when it was bought by the Bair-Collins Company. The mine was completely reorganized and became an example of inovative mining techniques which made it possible for the Keene to mine its relatively thin seams profitably. The new company first changed the mine from a slope to a shaft and deliberately designed the operation for a maximum daily output of 600 tons which allowed them to keep down the investment in equipment (Figure 24). The workings were driven at angles of 30° from the main entries which permitted easier grades into the rooms (see Figure 25 of the mine workings in 1922). The coal cars were also redesigned to work in the thin seams (Figure 26). Not only was the car much lighter (1,200 pounds) but also lower to fit in the restricted working places and make it easier to load large lumps which reduced the work of the loaders. Steel ties were used since they further reduced the heigth of the car and tracks. Other inovations in the mine included an automatic sump pump system; a new type shaker-screen; a simplified main hoist operation; and the use of a combination trolley-and-storage-battery locomotive to haul and coal cars from the workings. The mine employed an average of 65 men and was a steady producer until 1930 when the mine was completely worked out and was forced to close (Schloss 1922; Cebull 1958).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24ML190

1.2 Site name/field designation: Square Deal Mine

1.3 County: Musselshell

1.4 Township/range:

T 8N R 25E SE 1/4 NE 1/4 SE 1/4 of Section 17

1.5 UTM:

Zone 12 683,450 Easting 5,146,750 Northing

1.6 Site type:

Historic Coal Mine

1.7 Recording status & comments:

recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mines Reclamation
Program

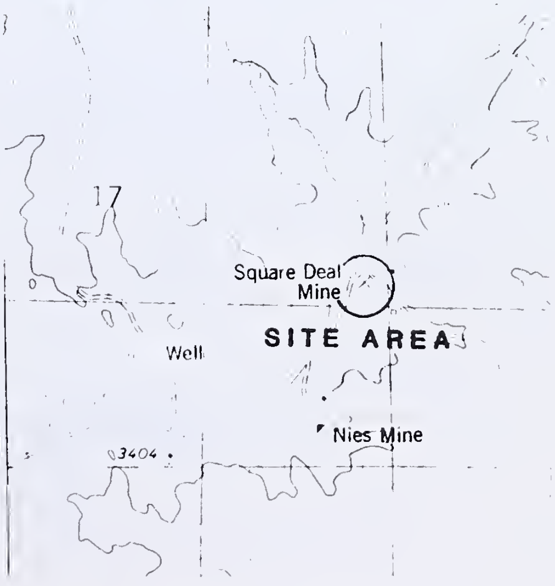
1.11 General narrative description of site:

The site consists of a recently abandoned coal mine located in the hilly, wooded terrain of the western edge of the Bull Mountains. The site is situated at the base of west-facing line of hills on the east side of the county road which runs just north of the site.

1.12 Map reference:
Roundup, Mont. 1979 - 1:24,000

1.13 City/town: ☒ vicinity of
Roundup, Montana

1.14 Access to site:
Take U.S. Highway 12/87 SW from Roundup for 1 mile. Turn NW onto county road and travel for 2 miles to intersection. Continue west past intersection and then SW for 1 mile to site which will be located on the east side of the road.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML190

2.1 Geographic setting:

2.2 Elevation: 1030 m 3380 ft.

The site area is within the western edge of the Bull Mountains and is characterized by low forested hills with areas of open grasslands.

2.3 View/aspect:
open to the northwest - closed in all directions

2.4 Major drainage:

Musselshell River

2.5 Minor drainage(s):

Horse Thief Creek

2.6 Water sources:

Names Distance Ele. Change Type & seasonality

a. an upper tributary of Horse Thief Creek runs adjacent to the north side of the site.
b.

2.7 Regional vegetation:

ponderosa pine forest

2.8 Local vegetation:

range grasses, *Rhus* and ponderosa pine trees

2.9 Soils:
gravelly

2.10 Surface visibility/season of survey:
good/autumn

2.11 Other environmental factors pertaining to site location:

The site area overlies the Bull Mountain Coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML190

3.1 Condition of site: The site is in poor condition with many of the mine structures destroyed or deteriorating.

3.2 Site significance (NRHP):

The site is not recommended for listing on the National Register of Historic Places. The most significant mine-related structure, the tipple, has been removed while the remaining structures are of recent origin, dating from the 1960s, and are of no particular historical or technological interest.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close any mine openings and either remove or reclaim coal waste areas.

3.4 Recommendations:

The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 11/10/83	3.6 Site recorded by: P. Anderson Date: 11/10/83	3.7 Revisions by: Date:

3.8 Permit No. 83-MT/ND/SD-042

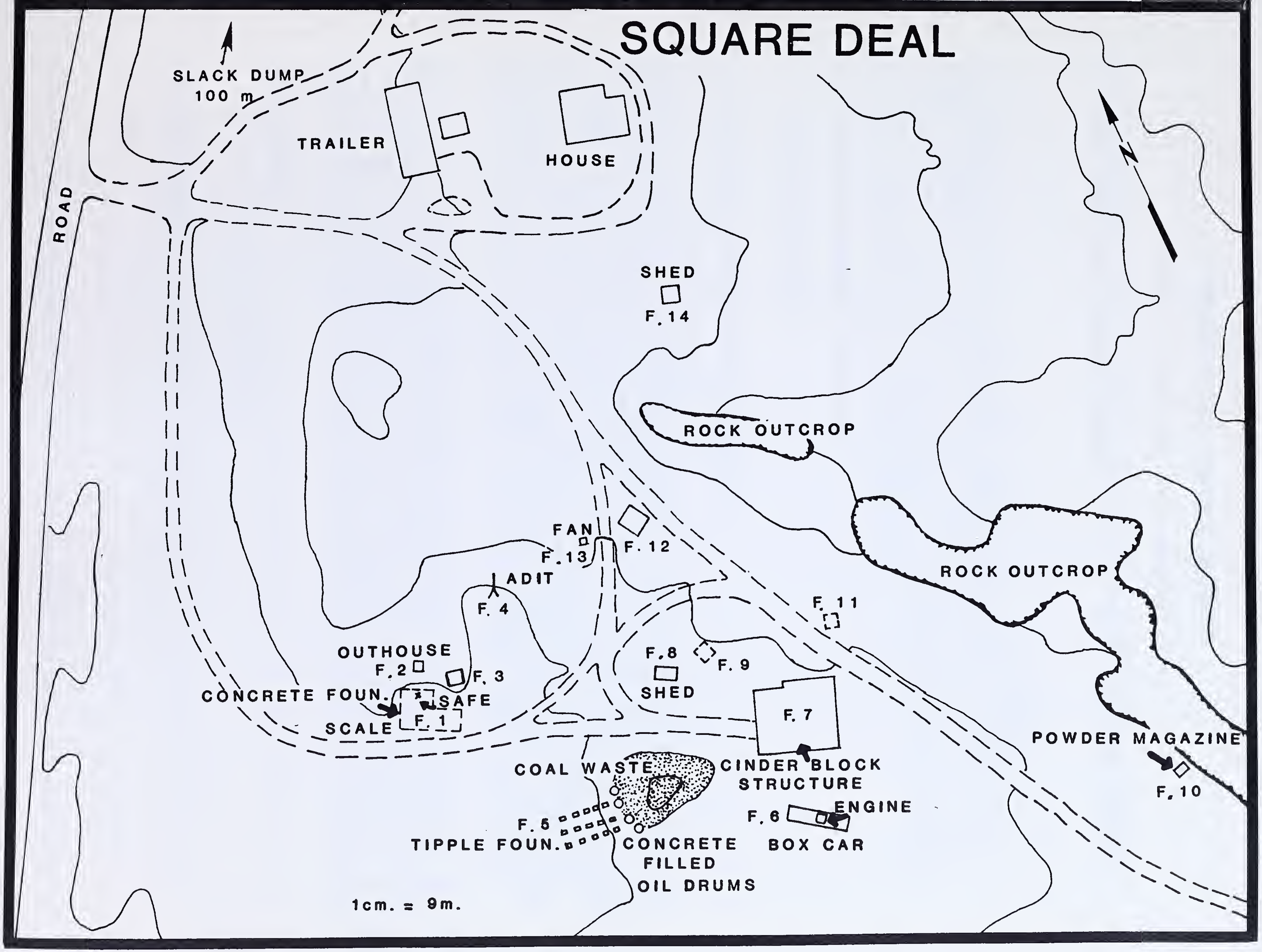
3.9 Publications concerning site: Travis, Raymond G. and Louis A. Turnbull, Coal Mining Methods and Practices and Electric Power Requirements in the Bull Mountain Coal Field, Montana. U.S. Bureau of Mines, Report of Investigations 4684, April, 1950.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Description	View
Roundup proof V photos #105-109		

SQUARE DEAL


SLACK DUMP
100 m
TRAILER
HOUSE
N
ROAD
SHED
F. 14
ROCK OUTCROP
ROCK OUTCROP
FAN
F. 13
F. 12
ADIT
F. 4
F. 11
OUTHOUSE
F. 2
F. 3
F. 8
F. 9
SHED
CONCRETE FOUN.
SAFE
SCALE
F. 1
F. 7
POWDER MAGAZINE
F. 10
COAL WASTE
CINDER BLOCK
STRUCTURE
ENGINE
F. 5
F. 6
TIPPLE FOUN.
CONCRETE
FILLED
OIL DRUMS
BOX CAR
1cm. = 9m.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML190

5.1 Site dimensions, how determined:

49,000 m^2

5.2 Features: 1) 8 x 11 m concrete foundation for scales, 2) outhouse, 3) 2 x 2 m scales shed, 4) adit portal, 5) concrete-filled oil drums used for tipple foundations, 6) RR box car shed (3 x 12 m) with electric mine engine inside, 7) 14 x 15 m cinder block shop, 8) 2 x 3 m wood shed, 9) foundation for small bldg., 10) 2 x 2 m powder magazine, 11) foundation for small bldg., 12) 2 x 3 m wood shed, 13) mine ventilation fan

5.3 Artifacts (observed, collected):

miscellaneous debris

5.4 Historical information and evaluation:

The land on which the Square Deal Mine is located and first patented to the Northern Pacific Railroad Company on November 18, 1895 (patent #2). The first mining on the property was not begun until the early 1920s when the first development was undertaken by Sam Moss who held a lease on the property. Around 1932 the mine was taken over by Harley Klinger. A few years later he sold out to [first name unknown] Berkley. Then around 1945 the mine was bought by the Rackie brothers (Joel, Steve and Tony) who were incorporated as the Northern Coal Company. The mine's last owner was Virgil Cross who bought it in 1958 and operated it until it closed in 1970. Cross then opened a small strip mine a short distance west of the mine from 1971 to 1972 (Cross 1984; Harmon 1984).

Most of the mine's development occurred during the period that Cross owned it and the remains currently on the site date from this period during the 1960s. The mine operated on a seasonal basis for generally about four months out of the year. In 1947 it produced 1600 tons of coal and employed four men. A shortwall cutting machine was used to mine the 42 inch thick bottom bench of coal. The mine workings were reached by a slope entry driven into the rock outcrop (Travis and Turnbull 1950; Cross 1984).

5.5 References

(see section 3.9 of this form)

5.6 Subsurface testing, results, methods, etc.

none

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number:
24ML191

1.2 Site name/field designation:
Nies Mine

1.3 County:
Musselshell

1.4 Township/range:

T 8N R 25E SE 1/4 SE 1/4 SE 1/4 of Section 17

1.5 UTM:

Zone 12 683,500 Easting 5,145,650 Northing

1.6 Site type:

Historic Coal Mine

1.7 Recording status & comments:

recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mines Reclamation
Program

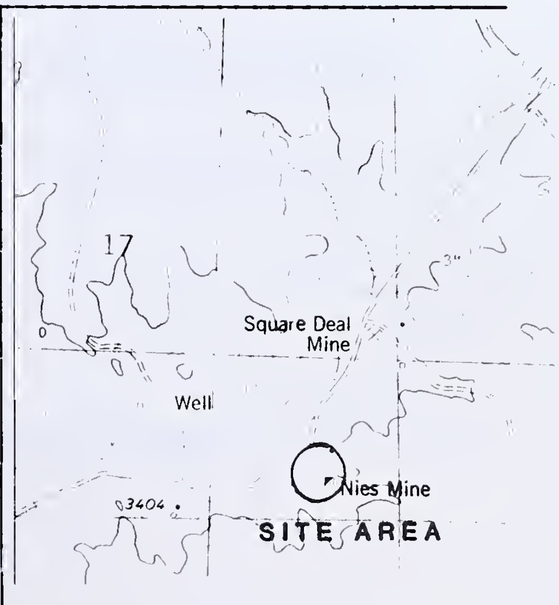
1.11 General narrative description of site:

The site is a recently abandoned small coal mine which is still intact. The mine is located at the base of the NW-facing line of hills along the south side of the county road which runs through the area.

1.12 Map reference:
USGS Roundup, Mont. 1979 - 1:24,000

1.13 City/town: ☒ vicinity of
Roundup, Montana

1.14 Access to site:
Take U.S. Highway 12/87 from Roundup for one mile and then turn NW on county road. Travel 2-1/2 miles to intersection and continue west for another mile to the site which is located on the east side of the road.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML191

2.1 Geographic setting:

2.2 Elevation: 1030 m 3380 ft.

The site is located on the western edge of the Bull Mountains which is characterized by forested hills and open rangeland with occasional sandstone outcrops.

2.3 View/aspect:

open to the north and restricted in all other directions

2.4 Major drainage:

Musselshell River

2.5 Minor drainage(s):

Horse Thief Creek

2.6 Water sources:

Names	Distance	Ele. Change	Type & seasonality

a. An upper tributary of Horse Thief Creek flows intermittently through the north edge of the site area.
b.

2.7 Regional vegetation:

ponderosa pine forest and rangelands

2.8 Local vegetation:

range grasses, Rhus, patches of sagebrush and ponderosa pine trees

2.9 Soils:
gravelly

2.10 Surface visibility/season of survey:
good/autumn

2.11 Other environmental factors pertaining to site location:

The site area overlies the Bull Mountain coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML191

3.1 Condition of site: The site was in operation into the 1970s and is still intact. It is starting to deteriorate but remains in good condition.

3.2 Site significance (NRHP):
Although the site integrity is good, the Nies Mine is less than 50 years old and thus does not meet the criteria for listing on the National Register of Historic Places. The mine does not appear to have been of sufficient economic significance to the area to be an exception to the 50-year guideline. The site, therefore, is not recommended for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:

The Department of State Lands plans to close the mine openings, either reclaim or remove coal waste areas, and remove hazardous structures.

3.4 Recommendations:

The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 11/8/83	3.6 Site recorded by: P. Anderson Date: 11/8/83	3.7 Revisions by: Date:

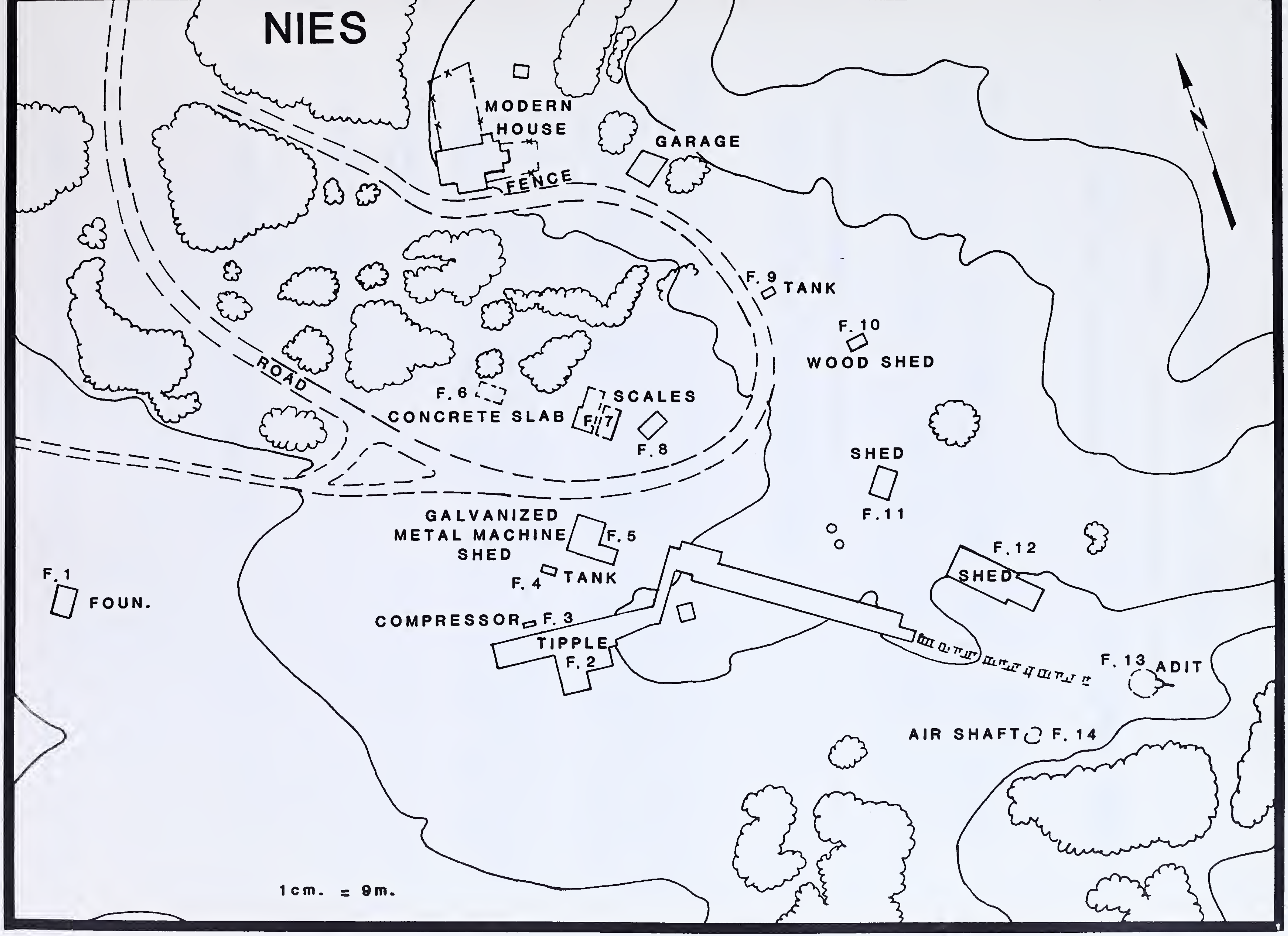
3.8 Permit No. 83-MT/ND/SD-042

3.9 Publications concerning site: Travis, Raymond G. and Louis A. Turnbull, Coal-Mining Methods and Practices and Electric Power Requirements in the Bull Mountain Coal Field, Montana. U.S. Bureau of MInes, Report of Investigations 4684, April, 1950. Cebull, Rudolph J., History of Coal Mining in Musselshell County, Roundup Record-Tribune. April 3, 1958.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Description	View
Roundup proof I photos #16-26		


NIES
N
MODERN
HOUSE
GARAGE
FENCE
F. 9 TANK
F. 10
WOOD SHED
ROAD
F. 6
CONCRETE SLAB
SCALES
F. 7
F. 8
SHED
F. 11
GALVANIZED
METAL MACHINE
SHED
F. 5
F. 12
SHED
F. 1
FOUN.
F. 4 TANK
COMPRESSOR F. 3
TIPPLE
F. 2
F. 13 ADIT
AIR SHAFT F. 14
1cm. = 9m.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML191

5.1 Site dimensions, how determined:

20,000 m^2

5.2 Features: 1) 5 x 6 m foundation, 2) tipple, complex - wood and metal measuring ca. 90 x 5-10 m, 3) compressor, 4) tank, 5) 6 x 9 m galvanized metal machine shed, 6) 4 x 5 m concrete slab, 7) scale platform and shed, 8) 3 x 5 m concrete foundation, 9) tank, 10) 2 x 3 m wood shed, 11) 4 x 5 m wood shed, 12) 4 x 15 m wood shed with metal siding, 13) adit portal, 14) air shaft

5.3 Artifacts (observed, collected):

miscellaneous lumber and scrap metal debris

5.4 Historical information and evaluation:

The land on which the site is located was a railroad section granted to the Northern Pacific Railroad on November 18, 1895 (patent #2). The mining operation, however, came much later. The mine was first opened by Fred and Gus Nies in 1947. Later it was run by Fred Nies' son, William Nies, until it closed in 1971.

The mine portal was a slope driven from the outcrop into the seam. In 1947 total production was about 4000 tons with a daily average of 30 tons mined by four to six men. The operation was a typical small-scale mine which sold coal on the local market for domestic use (Cross 1984; Travis and Turnbull 1950).

5.5 References

(see section 3.9 of this form)

5.6 Subsurface testing, results, methods, etc.

none

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number:
24ML192

1.2 Site name/field designation:
Nelson Brothers Mine (Nies No. 2)

1.3 County:
Musselshell

1.4 Township/range:

		SW 1/4	SE 1/4	Section 17
T 8N	R 25E	NW 1/4	NE 1/4 of	Section 20

1.5 UTM:

	683,100		5,145,560	
Zone 12	682,900	Easting	5,145,400	Northing

1.6 Site type:
Historic Coal Mine

1.7 Recording status & comments:
recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mines Reclamation Program

1.11 General narrative description of site:

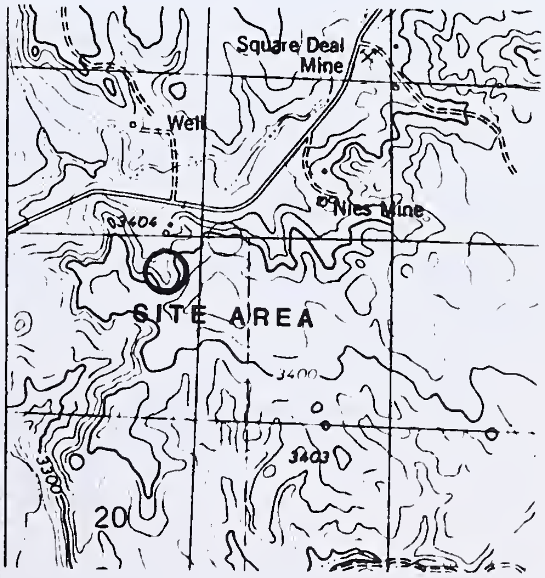
The site consists of a small coal mining operation located within the sandstone outcrops of the forested hills which run along the south side of the county road through this area. On the north side of the road runs a small intermittent stream which flows into Horse Thief Creek. Two adits have been driven into the coal seam at the outcrop. Little structural evidence remains at either adit.

1.12 Map reference:
USGS Roundup, Mont. 1979 - 1:24,000

1.13 City/town: ☒ vicinity of
Roundup, Montana

1.14 Access to site:

Take U.S. Highway 12/87 from Roundup for one mile and then turn NW on county road. Travel 2-1/2 miles to intersection and continue west for another mile and a half to the site which is located on the south side of the road.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML192

2.1 Geographic setting:

2.2 Elevation: 1036 m 3400 ft.

The site is located in the western edge of the Bull Mountains which is characterized by forested hills and open rangeland with occasional sandstone outcrops.

2.3 View/aspect:
restricted in all directions

2.4 Major drainage:

Musselshell River

2.5 Minor drainage(s):

Horse Thief Creek

2.6 Water sources:

Names	Distance	Ele. Change	Type & seasonality

a. An upper tributary of Horse Thief Creek flows intermittently through the north edge of the site area.
b.

2.7 Regional vegetation:

ponderosa pine forest and rangelands

2.8 Local vegetation:

range grasses, Rhus, patches of sagebrush and ponderosa pine trees

2.9 Soils:
gravelly

2.10 Surface visibility/season of survey:
good/spring

2.11 Other environmental factors pertaining to site location:

The site area overlies the Bull Mountain coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML192

3.1 Condition of site:
poor - no standing structural remains are on the site

3.2 Site significance (NRHP):

The site is of relatively recent origin and thus does not meet the criteria for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the mine openings and either remove or reclaim the coal waste areas.

3.4 Recommendations:

The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 4/13/84	3.6 Site recorded by: P. Anderson Date: 4/13/84	3.7 Revisions by: Date:

3.8 Permit No. 83-MT/ND/SD-042

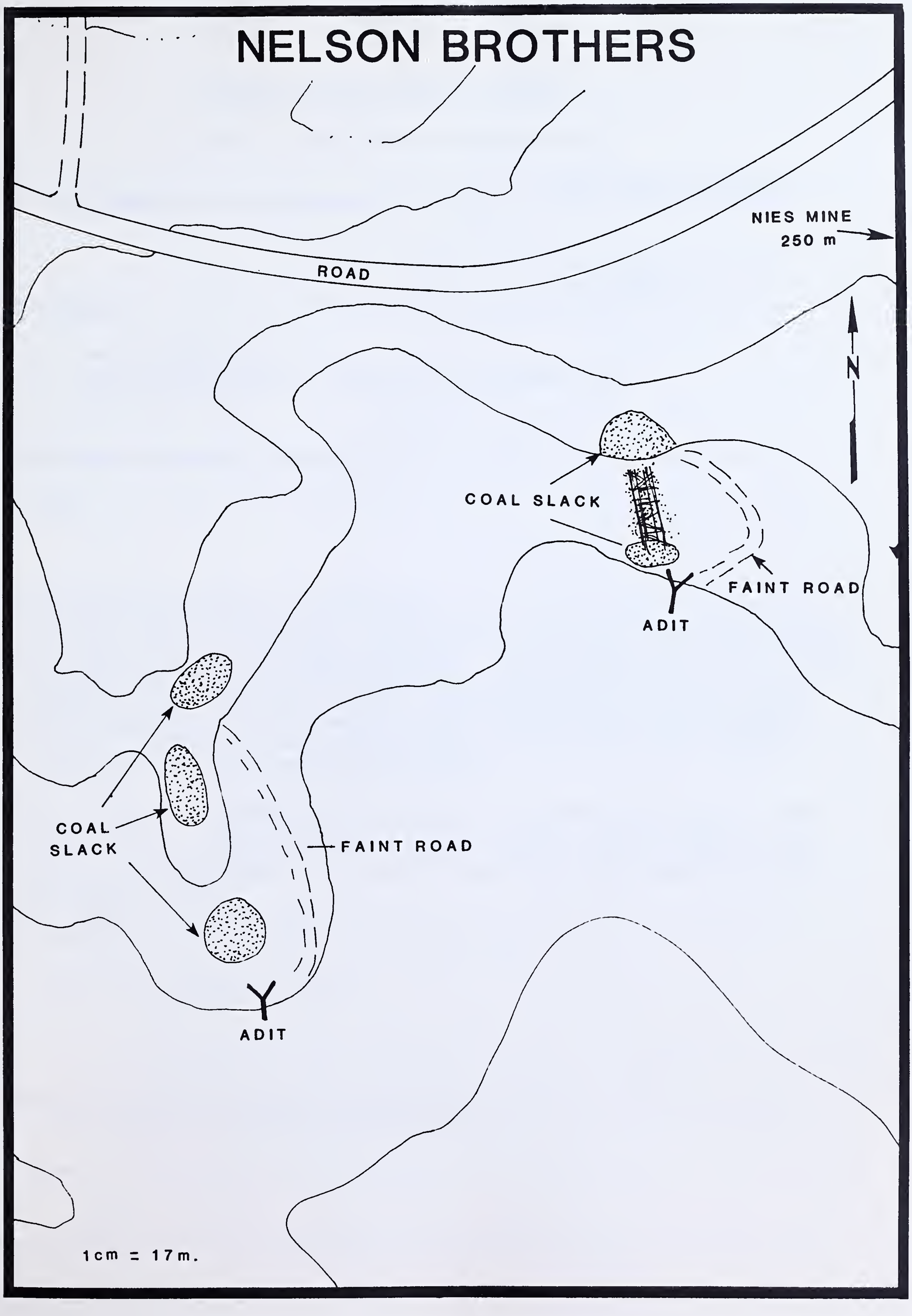
3.9 Publications concerning site: Travis, Raymond G. and Louis A. Turnbull, Coal-Mining Methods and Practices and Electric Power Requirements in the Bull Mountain Coal Field, Montana. U.S. Bureau of Mines, Report of Investigations 4684, April 1950. Cebull, Rudolph, J., History of Coal Mining in Musselshell County, Roundup Record-Tribune. April 3, 1958.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Roundup proof V	Description	View

NELSON BROTHERS



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML192

5.1 Site dimensions, how determined:

7500 m^2

5.2 Features:

1) two adit openings
2) lumber debris from the tipple at the northeast adit
3) coal waste dumps

5.3 Artifacts (observed, collected):

none

5.4 Historical information and evaluation:

The site area was originally a railroad grant given to the Northern Pacific Railroad on November 18, 1895 (patent #2). The two small mine adits on the site were not developed until the 1920s. Although the adits are in close proximity to the Nies Mine located a few hundred meters to the northeast, there apparently was no connection between the two sites. The northeast adit was little more than a prospect hole driven by the Nelson brothers (Floyd and [last name unknown] Cross 1984).

The adit at the southwest section of the site appears to have been a later development of a small prospect in 1950. The mine produced about 10 tons a day which was dug by two men. The total amount of coal produced by the mine was about 400 tons. It apparently never went into production (Travis and Turnbull 1950).

5.5 References

(see section 3.9 of this form)

5.6 Subsurface testing, results, methods, etc.

none

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24ML193

1.2 Site name/field designation: Johnson Mine (Original)

1.3 County: Musselshell

1.4 Township/range:

T 8N	R 25E	SW 1/4	NW 1/4	NW 1/4 of Section 15
		SE 1/4	SW 1/4	SE 1/4 of Section 9
		SW 1/4	SE 1/4	SE 1/4 of Section 9

1.5 UTM:

Zone 685,900 & 684,200 to 684,500 ________ Easting 5,146,890 & 5,147,200 to 5,147,400 ________ Northing

1.6 Site type: Historic Coal Mine

1.7 Recording status & comments: recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name: Department of State Lands Abandoned Mines Reclamation Program

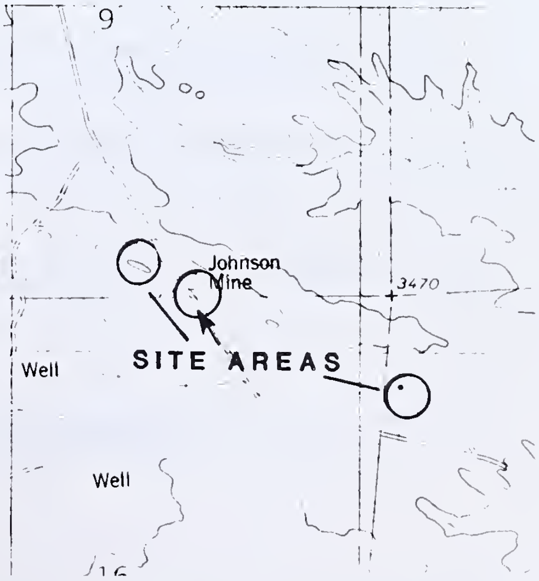
1.11 General narrative description of site:

The site consists of three separate components and the basic remaining feature at each area is an open mine portal. Some coal waste remains at the northwest section of the mine but no structures remain standing any where on the site. The components are located in a line through an open area surrounded by wooded hills.

1.12 Map reference:
USGS Roundup Quadrangle
1979 - 1:24,000

1.13 City/town: ☒ vicinity of
Roundup, Montana

1.14 Access to site:
Take the county road which heads northwest from U.S. Highway 12/87 one mile west of Roundup. The original mine portal is found at the Fergus Electric Coop station which is at the end of the road which branches off the county road 1-1/4 mile from the hywy. The remainder of the site is 1/4 mile north from the intersection of the county road in section 16. The main mine portal is under the road.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML193

2.1 Geographic setting:

2.2 Elevation: 1067 m 3500 ft.

The site is located in rolling, wooded country which form the northwest edge of the Bull Mountains.

2.3 View/aspect:

The view in all directions from the site areas is somewhat restricted by low hills and trees.

2.4 Major drainage:

Musselshell River

2.5 Minor drainage(s):

small intermittent streams which flows southeast into the Musselshell River

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	no standing water is in the vicinity of the site areas			
b.				

2.7 Regional vegetation:

ponderosa pine forest

2.8 Local vegetation:

ponderosa pine trees, *Rhus*, bluebunch wheatgrass, bluegrass and western wheatgrass

2.9 Soils:

rocky and gravelly

2.10 Surface visibility/season of survey:

good/autumn

2.11 Other environmental factors pertaining to site location:

The area overlies the Bull Mountain coal field

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML193

3.1 Condition of site:
The site has been virtually destroyed except for open mine portals, coal waste and scattered debris.

3.2 Site significance (NRHP):

The physical integrity of the site has been virtually destroyed. The site is not recommended for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close open mine portals and air shafts and either remove or reclaim coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson	3.6 Site recorded by: P. Anderson	3.7 Revisions by:
Date: 11/11/83	Date: 11/11/83	Date:

3.8 Permit No. 83-MT/ND/SD-042

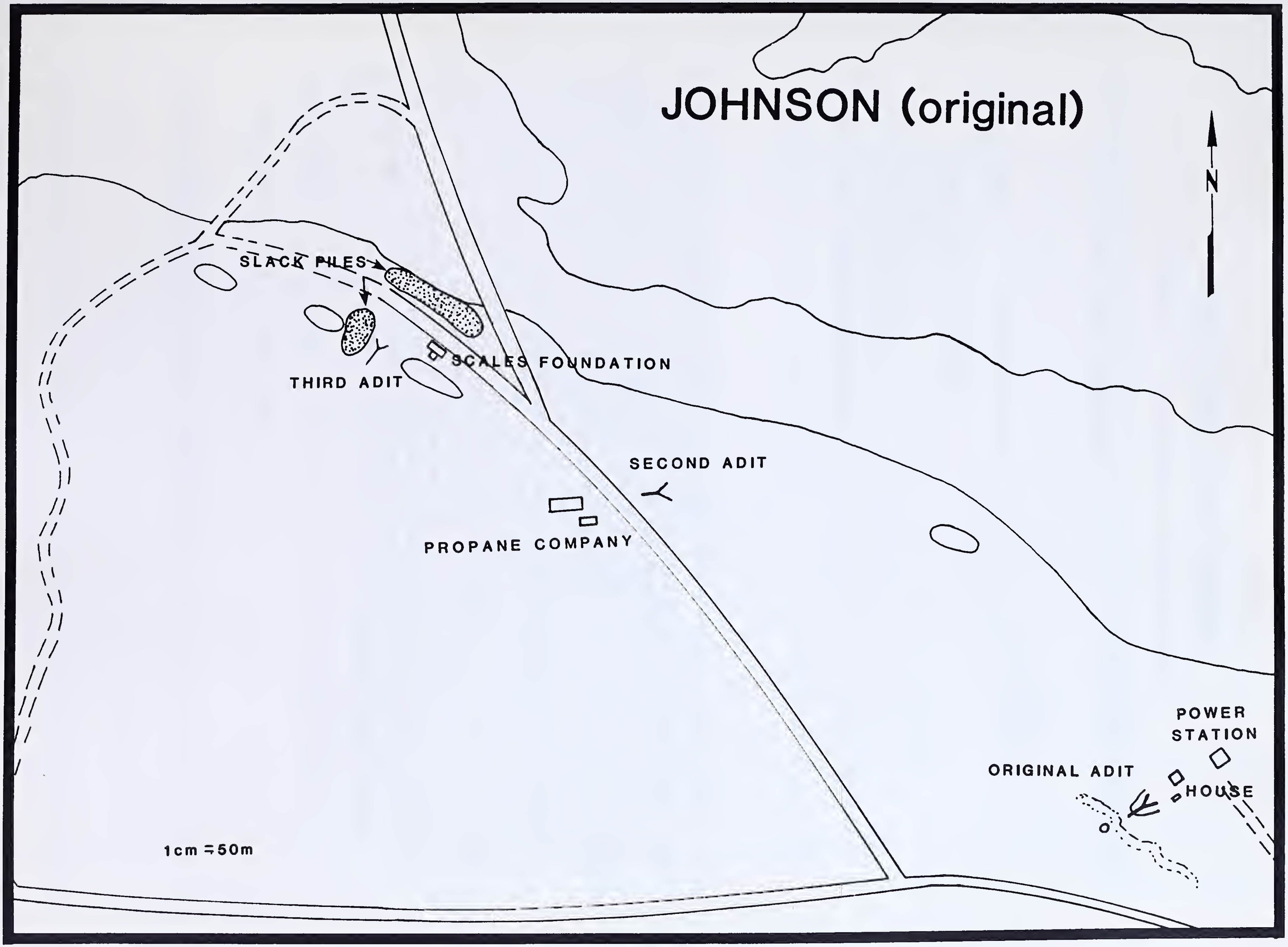
3.9 Publications concerning site: The Roundup Record-Tribune, August 14, 1947; Jan. 29, 1959; Oct. 8, 1959. Travis, Raymond G. and Louis A. Turnbull, Coal-Mining Methods and Practices and Electric Power Requirements in the Bull Mountain Coal Field, Montana. U.S. Bureau of Mines, Report of Investigations 4684, April, 1950.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Description	View
DSL Roundup III photos 110-121		

JOHNSON (original)



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML193

5.1 Site dimensions, how determined:

150,000 m^2

5.2 Features:

1. three open mine portals
2. air shaft
3. coal waste dumps
4. miscellaneous debris

5.3 Artifacts (observed, collected):

none

5.4 Historical information and evaluation:

The Johnson Mine was originally begun by Fred and Henry Tressel around 1920 on land that had been a railroad grant to the Northern Pacific Railroad on November 18, 1895. Carl H. Johnson then took over the property in 1921 and started a mine at the original adit. Later adits were driven to the northwest into the same coal seam. Johnson operated the mine until 1932 and then he associated with Victor Forstrom as the Johnson Coal Company. Johnson died in August, 1947 and the operation was taken over by Forstrom and Johnson's son, Glen Johnson. At this time the mine employed an average of five men who produced about 4,000 tons of coal a year. The mine virtually shut down by the early 1950s. Johnson tried to grow mushrooms in the mine for a while and then transfered his operation to the Western Mine where he later also tried to raise mushrooms (see Western Mine section of this report). The Johnson Coal Company then moved its operations to the Johnson No. 2 Mine site where it operated for the next ten years under Forstrom (see Johnson No. 2 Mine section of this report) Travis and Turnbull 1950; Roundup Record-Tribune August 14, 1947; Cross 1984).

5.5 References

(see section 3.9 of this form)

5.6 Subsurface testing, results, methods, etc.

none

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24ML194	1.2 Site name/field designation: Johnson No. 2 Mine (State Section)	1.3 County: Musselshell

1.4 Township/range:

T 8N R 25E N 1/2 of Section 16

1.5 UTM:

Zone 12 684,100 Easting 5,146,850 Northing

1.6 Site type: Historic Coal Mine	1.7 Recording status & comments: recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mines Reclamation
Program

1.11 General narrative description of site:

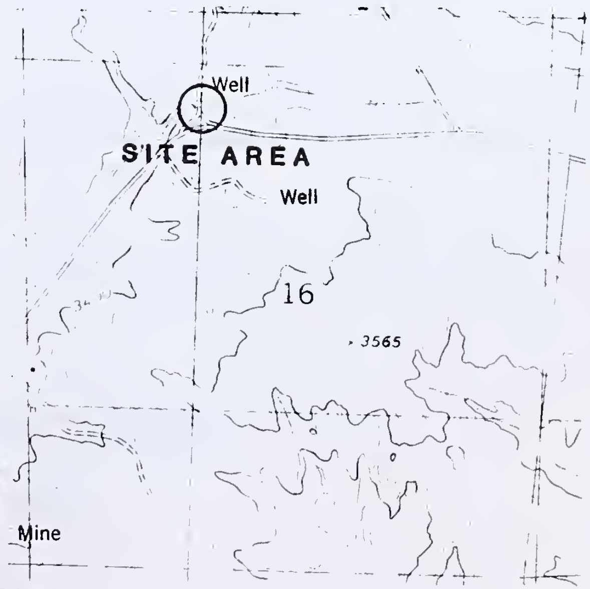
The site is located on the upper drainage of a tributary of Horse Thief Creek. The immediate site area is open, rolling grass lands with stands of pine trees. The dominent feature on the site is a large coal waste dump with an adit opening nearby. Little else from the mining operation remains on the site.

1.12 Map reference:
USGS Roundup, Mont. 1979 - 1:24,000

1.13 City/town: ☒ vicinity of
Roundup, Montana

1.14 Access to site:

Take U.S. Highway 12/87 one mile S/W. Turn N/W on county road and travel for 2 miles to the site area which is on the north side of the road.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML194

2.1 Geographic setting:

2.2 Elevation: 1036 m 3400 ft.

The site is located in rolling, open grass lands interspersed with stands of pine trees.

2.3 View/aspect:
open in all directions

2.4 Major drainage:

Musselshell River

2.5 Minor drainage(s):

upper tributary of Horse Thief Creek

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	intermittent stream			
b.				

2.7 Regional vegetation:

range grasses and ponderosa pine trees

2.8 Local vegetation:

(same as above)

2.9 Soils:

sandy and gravelly

2.10 Surface visibility/season of survey:

good/auturmn

2.11 Other environmental factors pertaining to site location:

The site area overlies the Bull Mountain coal field

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML194

3.1 Condition of site: The physical evidence from the mining operation have been almost eradicated.

3.2 Site significance (NRHP):

The physical integrity of the site has been destroyed and the site is considerably less than 50 years old. It is not, therefore, recommended as eligible for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close any mine openings and either remove or reclaim the coal waste areas.

3.4 Recommendations:

The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 11/11/83	3.6 Site recorded by: P. Anderson Date: 11/11/83	3.7 Revisions by: Date:

3.8 Permit No. 83-MT/ND/SD-042

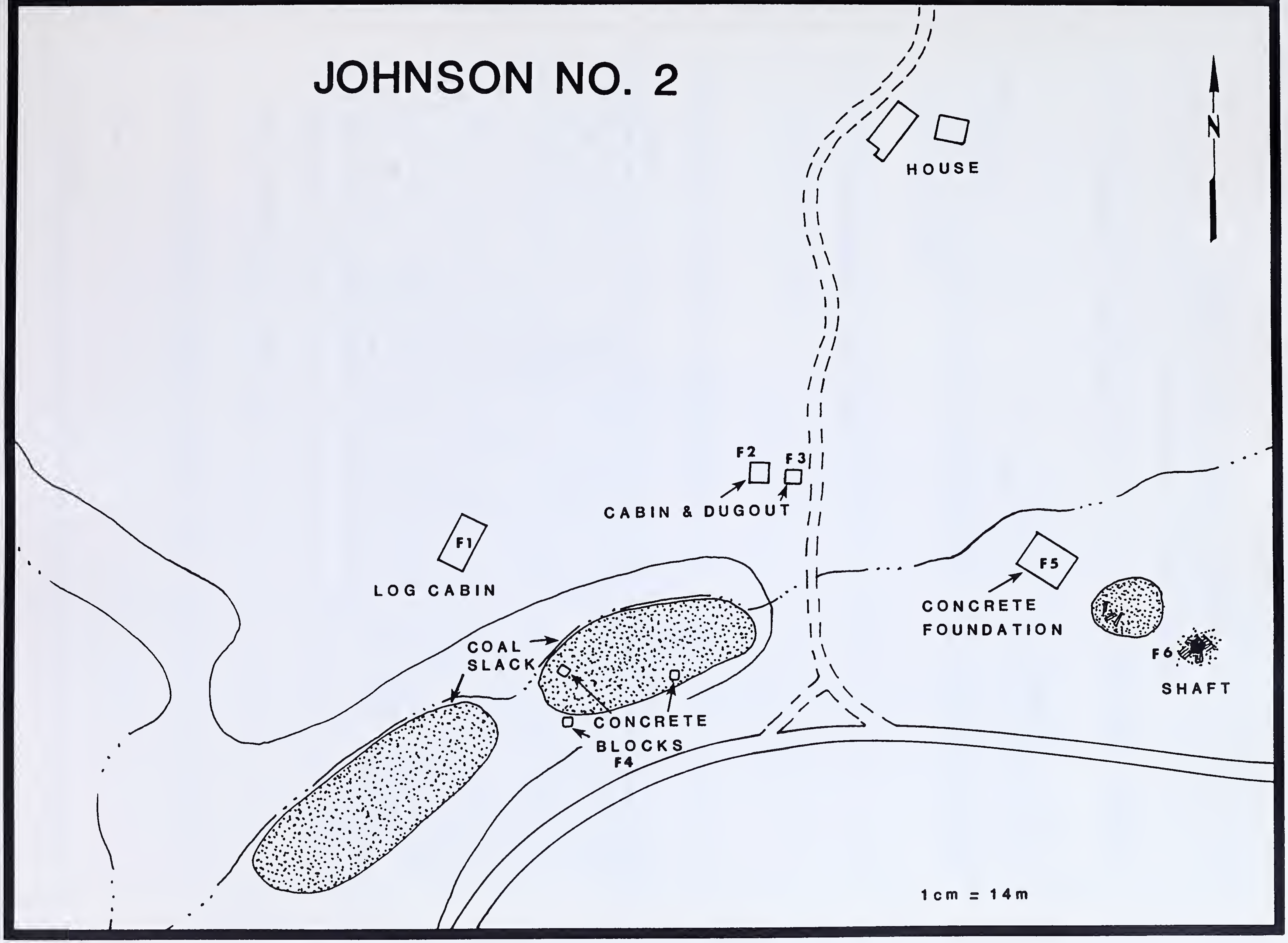
3.9 Publications concerning site: Travis, Raymond G. and Louis A. Turnbull, Coal-Mining Methods and Practices and Electric Power Requirements in the Bull Mountain Coal Field, Montana. Bureau of Mines Report of Investigations 4684, April, 1950.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Description	View
Roundup proof IV photos #112-119		

JOHNSON NO. 2


N
HOUSE
F2
F3
CABIN & DUGOUT
F1
LOG CABIN
COAL SLACK
CONCRETE BLOCKS
F4
F5
CONCRETE FOUNDATION
F6
SHAFT
1cm = 14m

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML194

5.1 Site dimensions, how determined:

40,000 m2

5.2 Features:

1) 3 x 5 m log cabin, 2) 2 x 3 m log cabin, 3) 2 x 3 m dugout, 4) concrete blocks, 5) 15 x 20 m concrete pad foundation, 6) mine shaft opening, 7) coal waste dumps

5.3 Artifacts (observed, collected):

miscellaneous debris

5.4 Historical information and evaluation:

The Johnson No. 2 Mine was a relatively late mining development in this area. The mine was established on the state school section land by the Johnson Coal Company (see Johnson Original Mine section of this report) under owner Victor Forstrom following the death of Carl Johnson in 1947. The mine had limited success during the next decade. In 1949 the tipple burned down but was rebuilt and production continued off and on through the 1950s. On January 29, 1959 a fire again destroyed the tipple and also the machine shop. At this time the mine was being operated under a lease by the Square Deal Coal Company and then was bought outright by Virgil Cross. The tipple and machine shop were rebuilt and the mine resumed production but then closed during the early 1960s. The mine was, at best, only a small operation with limited reserves of minable coal. The main opening was a drift which was driven in the coal bed from the outcrop. On the average, a couple of men were employed and about 1000 tons of coal a year were mined (Travis and Turnbull 1950; Roundup Record-Tribune January 29 and October 8, 1959; Cross 1984).

5.5 References

(see section 3.9 of this form)

5.6 Subsurface testing, results, methods, etc.

none

SITE FORM NO. 1

Montana Tech Alumni Foundation
MINERAL RESEARCH CENTER
Post Office Box 3708 • Butte, Montana 59701

Cultural Resource Inventory

1. Site Number 24ML165

2. County Musselshell

3. State Montana

4. Site Name
Commercial Mine

5. Other Names For Site
Roundup Coal Mining Company #3 Mine (or "mine A")

6. City or Town Vicinity of X
Roundup

7. Map Reference
USGS Roundup, Mont.
N4622.5-W10830/7.5
1979

8. Township & Range Number
T8N R25E

9. Section Number
N½ NW¼ Sec. 23 and
SW ¼ SW ¼ SW ¼ Sect. 14

10. Latitude
46 ° 26 ' 25 "

11. Longitude
108 ° 33 ' 50 "

12. U.T.M. Reference
6 8 6 7 5 0 5 1 4 5 4 5 0
1 2 | 6 8 7 5 0 0 | 5 1 4 5 8 0 0
Zone Easting Northing

Surface Ownership:
15. Federal State Private X

16. Mineral Ownership:
Federal State Private X
All Minerals
Coal Only

17. Project Name
Department of State Lands
Abandoned Mines Reclamation

18. National Register
On
Nominated
Determined Eligible
Recommended
Need Data
Not Eligible X

19. Site located by & Date
P. Anderson
11/13/82

20. This Record by & Date
P. Anderson
12/1/82

21. Revisions by & Date

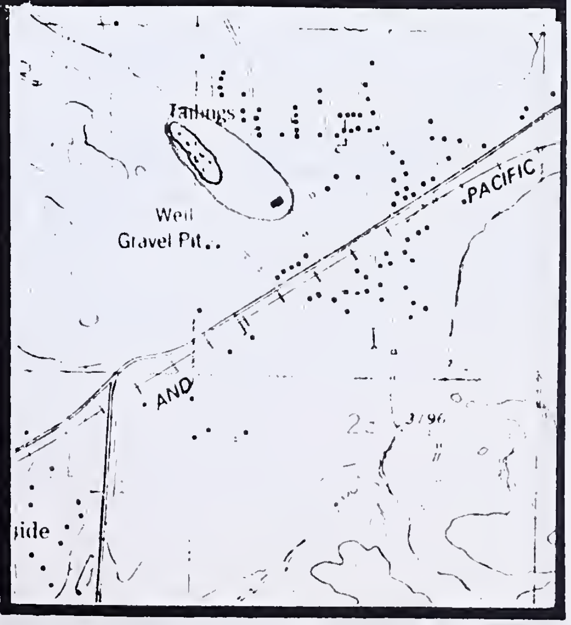
22. Site Category
Historic X
Prehistoric
Other specify

23. Site Status
Survey X
Photo/map X
Tested
Excavated
Other specify –
Comment:

13. Publications
USGS Bulletin 647 The Bull Mountain Coal Field, E. Russell Lloyd, 1917.
U.S. Bureau of Mines Report of Investigations 4684, April 1950.

14. Narrative of site location and access to site

The site area is located on the east side of the county road which runs northwest from U.S. Hywy 12 one mile southwest of Roundup. The site area runs from about 2000 m north of the highway to the tailings area about 7000 m from the highway.



SITE FORM NO. 2

SETTING AND CONDITION OF SITE

Site Name Commercial Mine

Phytogeography

1. Elevation
981 Meters 3220 Feet

2. Distance, direction and nature of nearest water source.
The Musselshell River is located ½ mile south of the site.

3. Soil (color, character, depth)

4. Geographic land form/ topography character/ slope / site faces:
Pine breaks, sandstone outcrops and rangeland

5. General vegetative community
Pine breaks and rangeland

6. On-site vegetation
sparse cover of range grasses

Site condition

7. Natural deterioration

Degree	Type
none	sheetwash
light	gully
moderate	wind erosion
heavy	animal disturb
complete	natural weathering

8. Human Disturbance (real/potential)

Degree		Type	Distance From
light		buildings	
moderate		towers	
complete	X	roads	
unknown			

Comments: Most of the original mine structures have been removed and the DSL plans to reclaim the tailings.

9. Environmental/Economic threats to site

Private development
Zoning
Vandalism, deterioration
Public works project
Mining
X Other (specify)

Comments: The Department of State Lands plans to remove or reclaim the tailings piles. Nothing else in the site area will be affected.

Site Name: Commercial Mine

HOMESTEAD/RANCH/FARM GENERAL FORM No.

1. General Description: (no. of buildings, general use, etc.)

- two tin-sided buildings measuring 8 x 22 m probably used originally as shops or maintenance

- The original tipple for the mine was built in 1908 and was torn down in 1927. A replacement tipple was constructed at the same location but burned down around 1957. No trace of the tipple remains on the site. It was located in the area to the north of the two remaining mine buildings.

Key to site sketch map and individual feature/building forms.

2. Historic Ownership:
(1) Roundup Coal Mining Co.
(2)
(3)

3. Date of construction:
unknown

4. Use (present, original):
Storage and a welding shop - originall
may have been for maintenance

5. Names Associated with Title:

Name (last name first)	Dates(s)	Deed Book Ref.

6. Track Book Reference:

Name	Type of Entry HE, CE, DLE, other	Serial No.	Patent No.	Representation on GLO Plat

10. Noted events associated with property or with persons associated with property:

The Commercial Mine operated from Sept. 1908 to 1962 and was one of the major coal mines in the Roundup area.

D1c

CULTURAL RESOURCE FORM NO. 6

Site Name Commercial Mine

1. Photos:

Accession	Description	Direction
1. Proof #1 - photos 1-16		
2.		
3.		
4.		

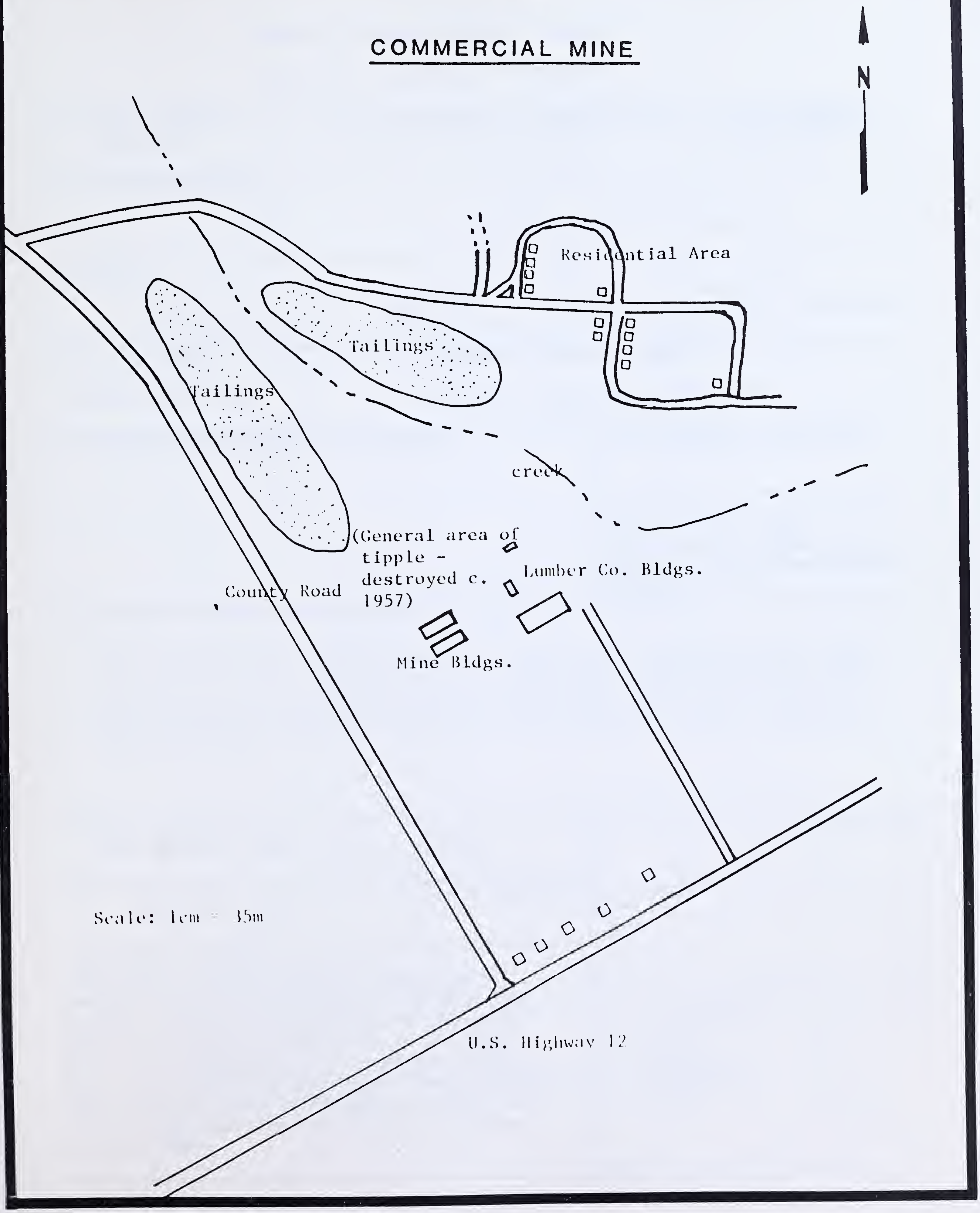
2. National Register Statement:

Most of the mine related structures have been either removed or dismantled. Nothing remains of the tipple or the mine portal. Two structures from the original mine operation and coal slack piles are all that survive from this once extensive operation. The two structures are currently used for storage and are in a poor state of repair. Much of the original mine area is now occupied by a lumber mill operation. The integrity of the site no longer exists and thus the site does not meet the criteria for listing on the National Register of Historic Places.

3. Recommendations:

The Department of State Lands plans to remove or reclaim the coal slack dumps. The mine area has been recorded, mapped and photographed and further work on the site would not reveal additional information. No further work on the site is recommended.

COMMERCIAL MINE



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24ML195

1.2 Site name/field designation: Jeffries Section 18 Mine

1.3 County: Musselshell

1.4 Township/range:

T 8N R 25E N1/2 SW 1/4 of Section 18

1.5 UTM:

Zone 12 690,400 Easting 5,146,200 to 5,146,350 Northing

1.6 Site type: Historic Coal Mine

1.7 Recording status & comments: recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name: Department of State Lands Abandoned Mines Reclamation Program

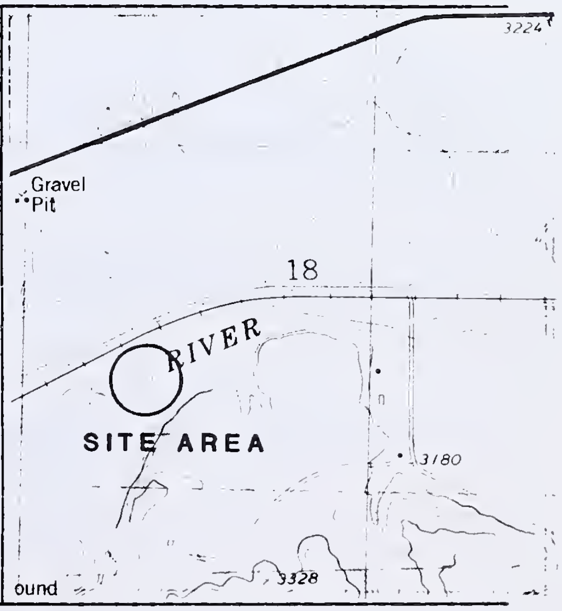
1.11 General narrative description of site:

The site consists of the remnants of a coal mine located adjacent to the Musselshell River. Ruins of the mining operation are found on both sides of the river with the mine entrance on the south side at the base of a north-facing hill and the foundation of the tipple and scales located on the north side.

1.12 Map reference: USGS Roundup, Mont. 1979 - 1:24,000

1.13 City/town: Roundup, Montana ☒ vicinity of

1.14 Access to site:
The part of the site south of the river is reached via the road through the county fairground. Travel east 1/4 mile and then hike north at the base of the cliff to the site area. The north part is reached by turning east on the abandoned RR right-of-way from the road leading to the fairgrounds. Travel for 1/2 mile and the site will be found adjacent to the RR ROW.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML195

2.1 Geographic setting:

2.2 Elevation: 975 m 3200 ft.

The site is located on the flood plain of the Musselshell River.

2.3 View/aspect:
open except to the south

2.4 Major drainage:

Musselshell River

2.5 Minor drainage(s):

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	Musselshell River			
b.				

2.7 Regional vegetation:

ponderosa pine forest and rangelands

2.8 Local vegetation:

Rhus, cottonwood trees, willows and grasses

2.9 Soils:

clay

2.10 Surface visibility/season of survey:
good/spring

2.11 Other environmental factors pertaining to site location:

The site area overlies the Bull Mountain coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML195

3.1 Condition of site:
poor - no standing structures remain

3.2 Site significance (NRHP):

The physical integrity of the site has been destroyed and thus the site is not recommended for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:

The Department of State Lands plans to close any mine openings and either remove or rclaim the coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 4/12/84	3.6 Site recorded by: P. Anderson Date: 4/12/84	3.7 Revisions by: Date:

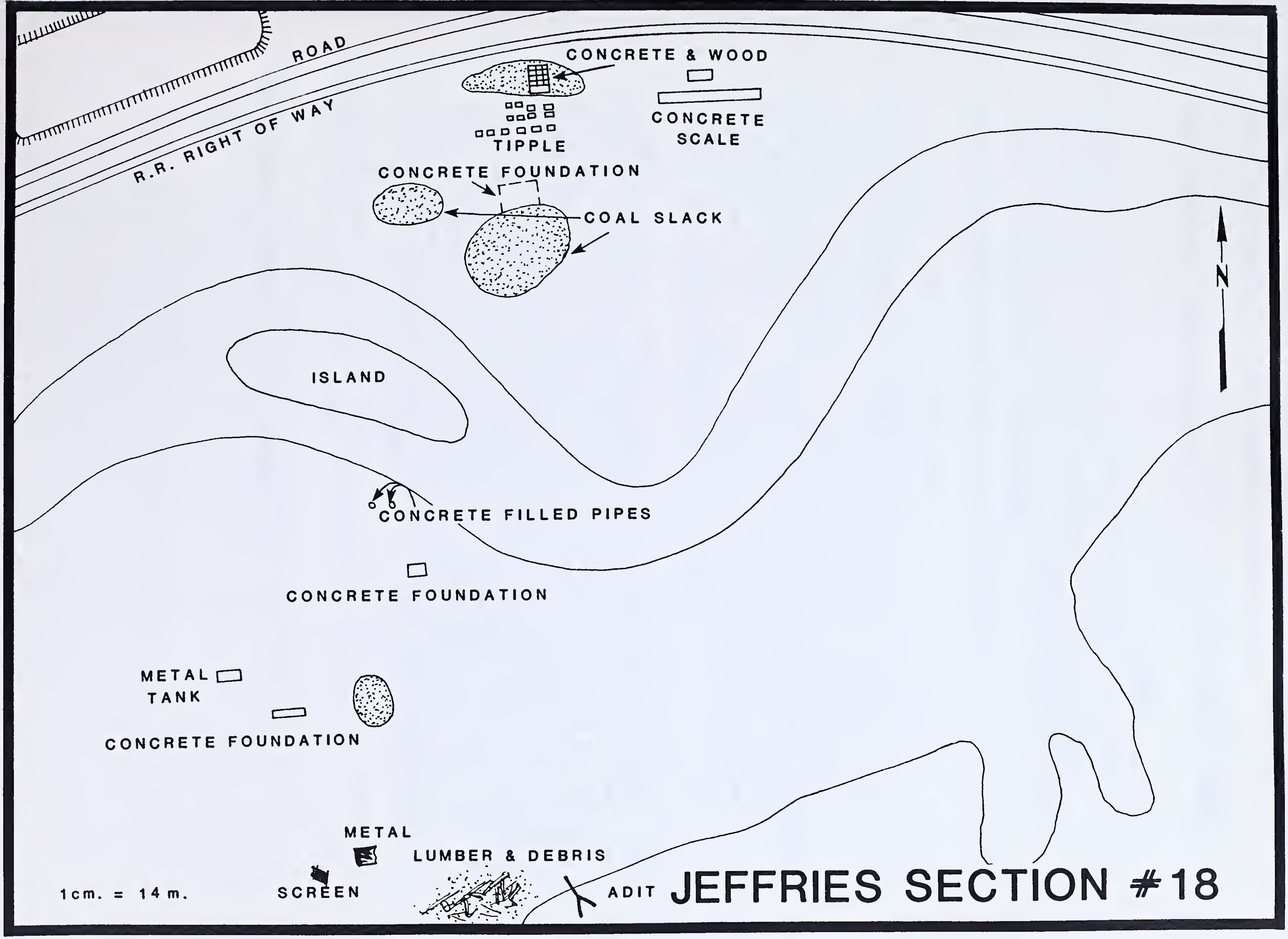
3.8 Permit No. 83-MT/ND/SD-042

3.9 Publications concerning site: Cebull, Rudolph J., History of Coal Mining in Musselshell County, Roundup Record-Tribune, April 3, 1958. Roundup Record, August 6, 1920; August 3, 1928; February 15, 1929, March 22, 1929. Roundup Record Tribune, February 29, 1940.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Roundup proofs V	Description	View



JEFFRIES SECTION #18

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML195

5.1 Site dimensions, how determined:

15,000 m^2

5.2 Features:

(north side river) 1) concrete footings for tipple, 2) small (1.2 x 2 m) shed and concrete scales pit, 3) coal waste dump (south side river), 4) concrete-filled pipe, 5) concrete foundation, 6) adit entrance, 7) concrete wall, 8) metal tank

5.3 Artifacts (observed, collected):

miscellaneous lumber and metal debris

5.4 Historical information and evaluation:

The site area was first acquired by John W. Newton on June 8, 1906 as a cash entry patent (#955). There is no evidence that Newton ever mined coal on the property although he did operate a small coal mine on the Horse Thief Creek during the 1920s (Roundup Record May 12, 1922). The first mining on the site was undertaken by a group of Minneapolis businessmen as the M & M Mine. The enterprise was not very successful and never went into commerical production. The Minnesota group was plagued by financial problems until creditors took over the property (Cebull 1958; Roundup Record February 15, 1929).

In 1928 the mine was acquired by the Jeffries Coal Mining Company. The company had operated a small mine on Horse Thief Creek for 12 years. The mine was said to have been one of the best small mines in the area, producing an average of nine tons per-man per-day, but by 1928 it had been worked out and had to close. The company moved its operation to the M & M, bought new equipment and leased 140 acres from the Republic Coal Company. In March of 1929 the mine went into production and by 1933 it produced 23,491 tons. The mine continued to operate profitably until the spring of 1940. Due to the mine's location next to the Musselshell River it had a history of water problems which was kept under control by continuous pumping. However, high water in the river during the 1940 spring runoff flooded the mine which was never reopened (Cebull 1958; Roundup Record February 15, 1929; March 22, 1929).

5.5 References:

(see section 3.9 of this form)

5.6 Subsurface testing, results, methods, etc:

none

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number:
24ML196

1.2 Site name/field designation:
Davis No. 4 Mine (Oxbow)

1.3 County:
Musselshell

1.4 Township/range:

T 8N R 26E NW 1/4 SW 1/4 of Section 16
NW 1/4 SE 1/4 of Section 17

1.5 UTM:

Zone 12 692,550 & 693,250 Easting 5,146,450 & 5,146,400 Northing

1.6 Site type:
Historic Coal Mine

1.7 Recording status & comments:
recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mines Reclamation
Program

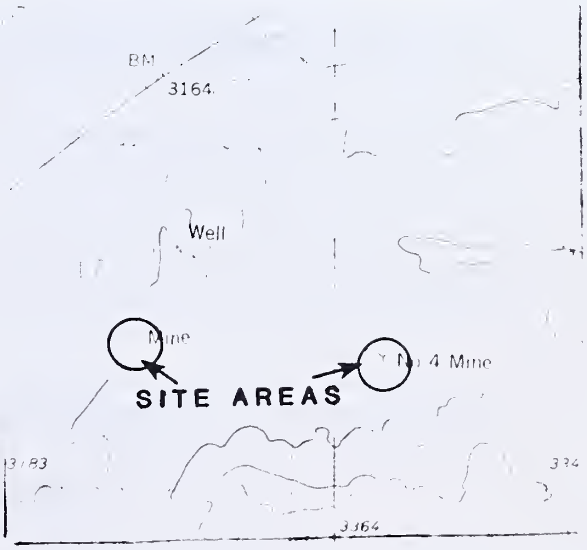
1.11 General narrative description of site:

The site consists of an abandoned coal mine. There are two components to the site: the original slope mine located on the flood plain 150 m east of the Musselshell River at the base of the west-facing cliff. Most of the site area is dominated by a large coal slack dump. The later mine is located 1/2 mile east of the river in wooded, hilly country at a higher elevation than the original mine. The remains of a tipple are the major structural still standing on the site.

1.12 Map reference:
USGS Gage, Mont. 1979 - 1:24,000

1.13 City/town: [X] vicinity of
Roundup, Montana

1.14 Access to site:
Both components of the site are reached via the county road which crosses the Musselshell River one mile east of Roundup. After crossing the river the road heads east. Travel east for 3/4 mile and take ranch road 1/4 mile along base of cliff to site area of original mine. The second shaft mine is found on the north side of the county road 1/2 mile east of the original mine.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML196

2.1 Geographic setting:

2.2 Elevation: 981 m 3220 ft.
994 3260

The original mine is located on the flood plain adjacent to the Musselshell River while the later shaft mine is located in the wooded, hilly terrain found south of the river.

2.3 View/aspect:
(original) - open to the west
(second) - open all directions

2.4 Major drainage:
Musselshell River

2.5 Minor drainage(s):

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	Musselshell River			
b.				

2.7 Regional vegetation:

ponderosa pine forest and open rangelands

2.8 Local vegetation:

ponderosa pine trees, cottonwood trees, Rhus and range grasses

2.9 Soils:

2.10 Surface visibility/season of survey:
good/autumn

2.11 Other environmental factors pertaining to site location:

The site areas overlie the Bull Mountain coal field

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML196

3.1 Condition of site: Poor - most of the surface facilities have been destroyed or removed and the only standing structure (the tipple) is in poor condition.

3.2 Site significance (NRHP):
The physical integrity of the site has been seriously impaired. Almost all structural evidence on the site has been either destroyed or removed. The only remaining standing structure is the tipple which is partially collapsed and is of no particular historical or technological significance. The mine was a short-lived operation which was of no great economic significance. The site is not recommended for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close mine openings, remove hazardous structures and either remove or reclaim coal waste areas.

3.4 Recommendations:

The work has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 11/10/83	3.6 Site recorded by: P. Anderson Date: 11/10/83	3.7 Revisions by: Date:

3.8 Permit No. 83-MT/ND/SD-042

3.9 Publications concerning site: Woolsey, L.H. et al., The Bull Mountain Coal Field. U.S.G.S. Bulletin 647, Government Printing Office, Washington, D.C. 1917. Cebull, Rudolph J., History of Coal Mining in Musselshell County Roundup Record-Tribune. April 3, 1958. Roundup Record, Dec. 9, 1910; Sept. 16, 1910; June 9, Nov. 10, Dec. 15, 1911, May 2, 1913; Mar. 23, 1917; April 19, 1918.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Description	View
Roundup proofs III & V photos #88-95		

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML196

5.1 Site dimensions, how determined:

70,000 m^2

5.2 Features: (original mine site) 1) concrete base (4 x 10 m) for mine shaft, 2) slope mine entrance with "D.H. 10" carved in rock next to adit, 3) brick and concrete foundation possibly for fan housing measuring 3 x 7 m, 4) concrete blocks which were possibly footings for a tipple - (second adit) 1) small concrete housing over air shaft, 2) slope adit entrance, 3) tipple remains (6 x 9 m),a 4) 1.2 x 6 m concrete foundation

5.3 Artifacts (observed, collected):
none

5.4 Historical information and evaluation:
The No. 4 Mine was one of the earliest major mines in the Roundup area when it first opened in 1909 by the Davis Coal Company, an Omaha, Nebraska firm. The mine quickly became a major producer with daily output from 500 to 1000 tons and employing some 200 men. In June, 1911 the property was bought by the Roundup Coal Mining Company from Wallace Millard. The new owners installed a new tipple and screening plant and, more important, a new electric water pump since the mine had considerable water problems due to its location next to the river. Plans were even made for creating a town of Davis and lots were platted and sold near the mine site. However, the water problems proved to be insurmountable and in the spring of 1914 the mine flooded and was abandoned. The mine's equipment was moved to the Carpenter Creek Mine (Woolsey 1917; Cebull 1958; Roundup Record January 14, December 9, 1910; June 9, 1911, March 29, 1912; May 2, 1913. (continued)

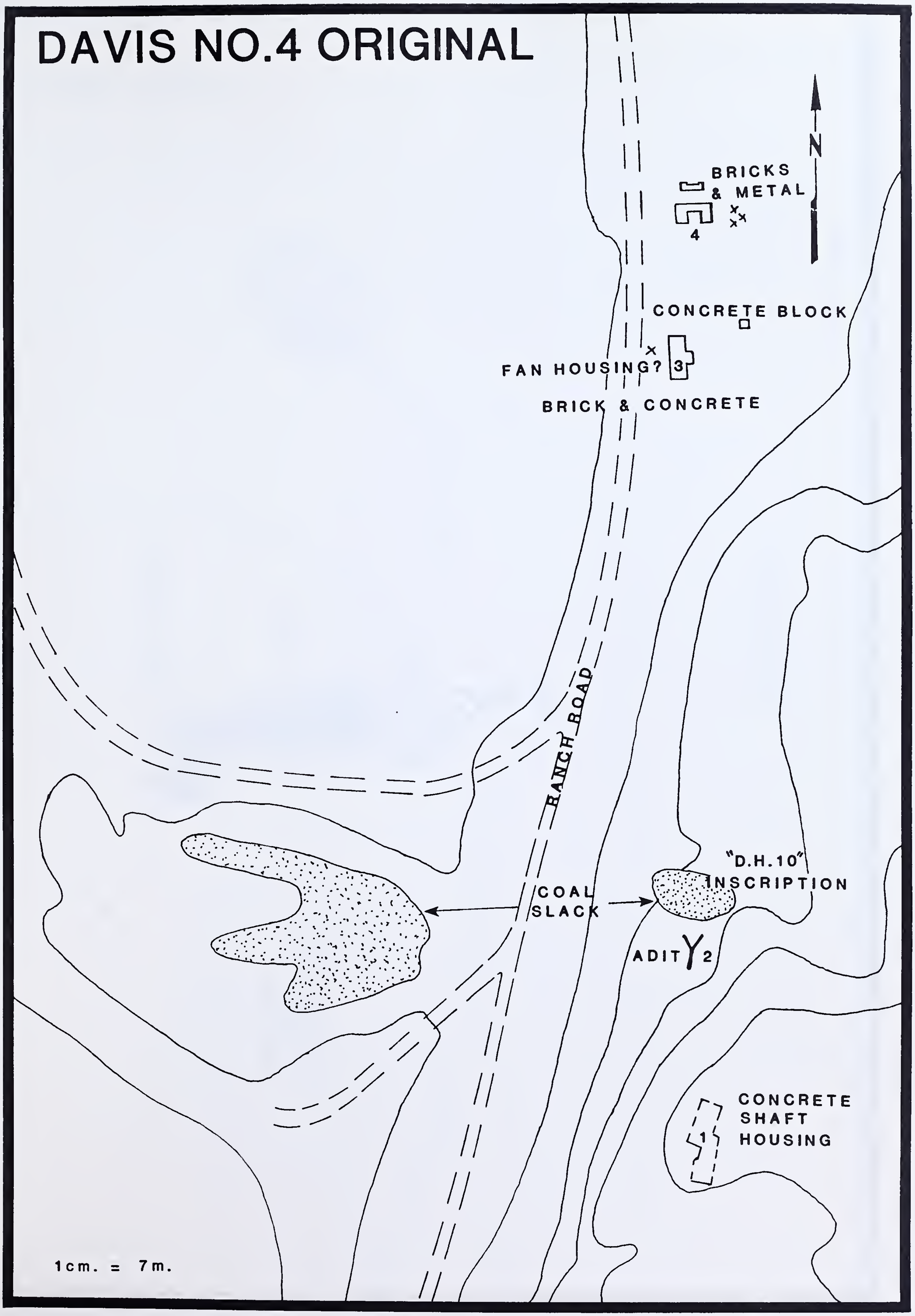
5.5 References

(see section 3.9 of this form)

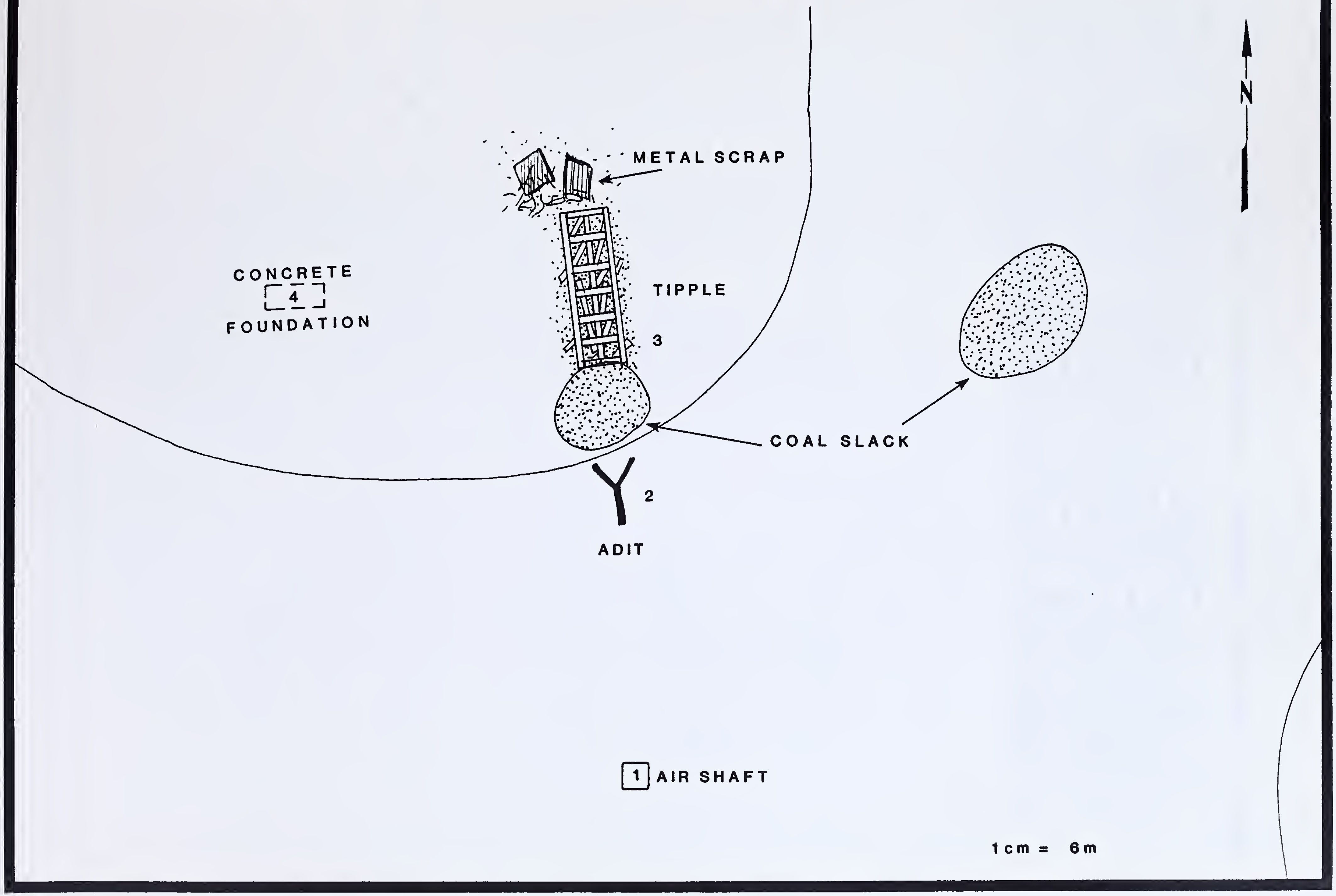
5.6 Subsurface testing, results, methods, etc.

none

DAVIS NO.4 ORIGINAL



DAVIS NO. 4 SECOND SHAFT



5.4 Historical information and evaluation: (continued) Site Number: 24ML196

Three years later the operation had a brief revival when the property was acquired by the Republic Coal Company. The company planned to reopen the workings for the Milwaukee Railroad. The second adit was apparently put in during this period between 1917 and 1918 and attempts were made to drain the mine workings. Apparently these efforts were not successful since there is no record of the mine going back into full production. Another attempt to resume production was reportedly made by Fred and Gus Nies who bought the mine around 1920 but, at best, the mine was operated (Roundup Record March 23, 1917; April 19, 1918; Cebull 1958; Cross 1984) for only a limited period before closing for good.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24ML197	1.2 Site name/field designation: Black Diamond Mine (Nelson)	1.3 County: Musselshell

1.4 Township/range:

T 9N R 30E S1/2 SE 1/4 NW 1/4 of Section 18

1.5 UTM:

Zone 12 270,000 Easting 5,158,830 Northing

1.6 Site type: Historic Coal Mine	1.7 Recording status & comments: recorded, mapped and photographed

1.8 Administrative/surface ownership:	1.9 Mineral ownership:
	1.10 Project name: Department of State Lands Abandoned Mines Reclamation Program

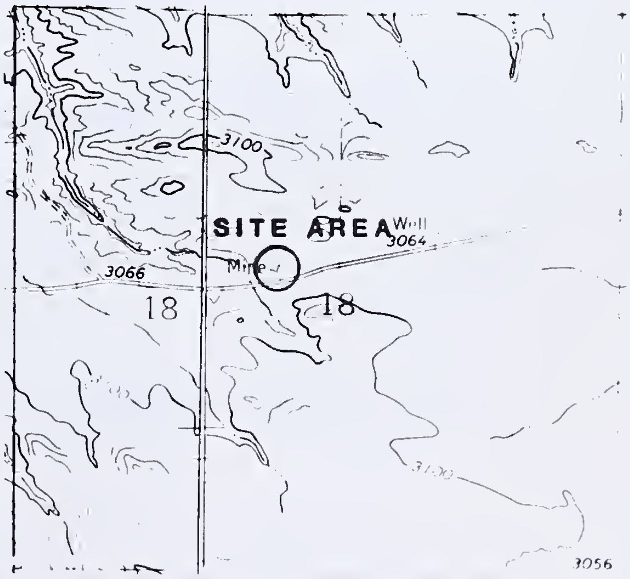
1.11 General narrative description of site:

The site is located along side the county road through section 18 in rolling, wooded terrain. The most prominent features left on the site are coal waste dumps. A few foundations and open adits are also on the site.

1.12 Map reference:
Queens Point, Mont. 1962 - 1:24,000

1.13 City/town: ☒ vicinity of
Melstone, Montana

1.14 Access to site:
Take U.S. Highway 12 west from Melstone for 5 miles. Turn south on county road and travel 1-1/4 miles to intersection. Turn west and travel for a little over a mile to the site which is adjacent to the north side of the road.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML197

2.1 Geographic setting:

2.2 Elevation: 957 m 3140 ft.

Rolling, open rangeland with ponderosa pine trees on the surrounding hills.

2.3 View/aspect:

open in all directions

2.4 Major drainage:
Musselshell River

2.5 Minor drainage(s):
intermittent stream which runs northwest into the Musselshell

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	none on the site			
b.				

2.7 Regional vegetation:

Eastern Montana ponderosa pine forest

2.8 Local vegetation:

range grasses, Rhus and patches of sagebrush

2.9 Soils:

gravelly

2.10 Surface visibility/season of survey:

good/autumn

2.11 Other environmental factors pertaining to site location:

Coal seams outcrops in the site area.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML197

3.1 Condition of site:
The site has been virtually eradicated.

3.2 Site significance (NRHP):

The physical integrity of the site has been all but destroyed with only remnants remaining of this relatively minor coal mining operation. The site is not recommended as eligible for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close any mine openings and either remove or reclaim the coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 11/9/83	3.6 Site recorded by: P. Anderson Date: 11/9/83	3.7 Revisions by: Date:

3.8 Permit No. 83-MT/ND/SD-042

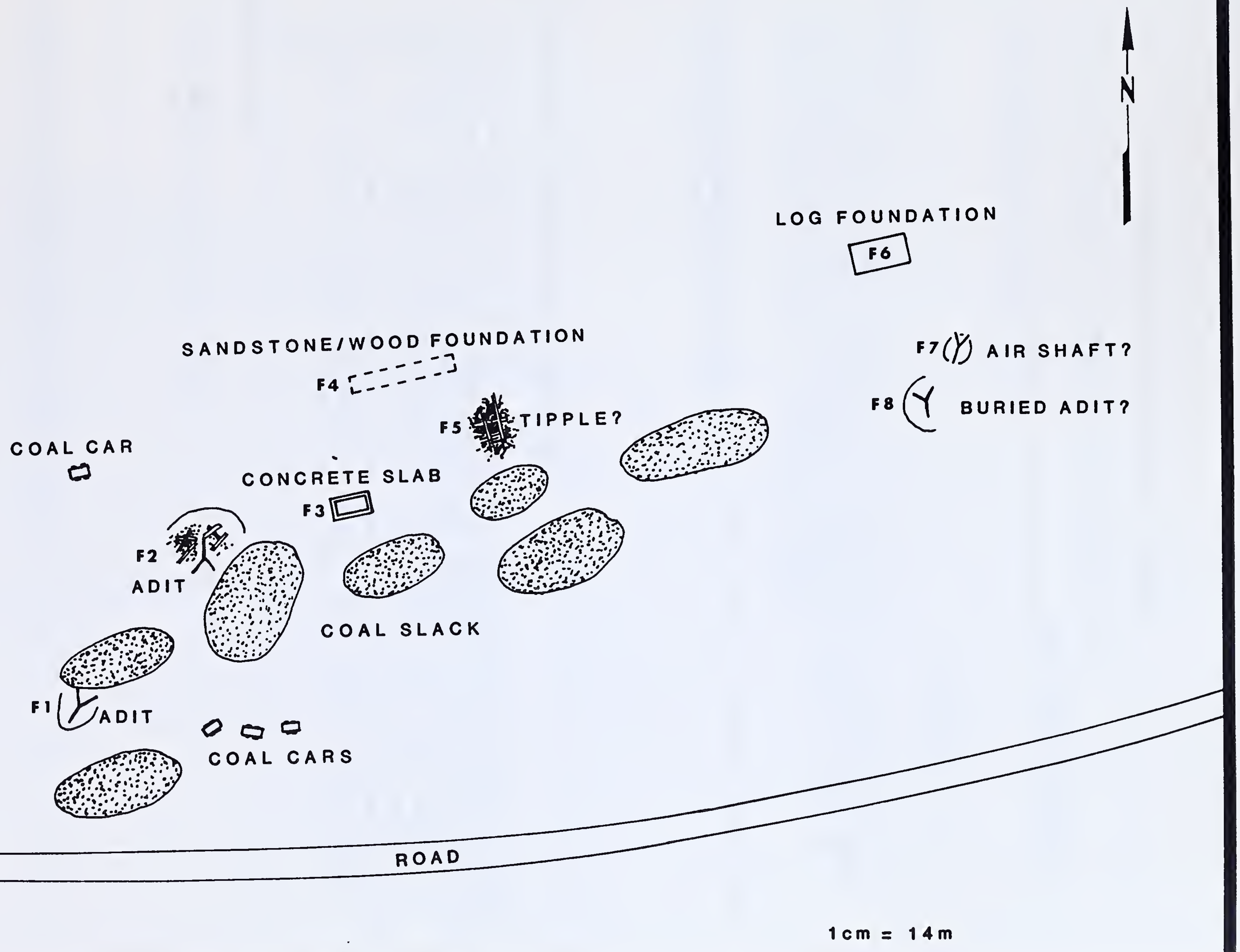
3.9 Publications concerning site: Turner, Scott (ed.) Analyses of Montana Coals. Bureau of Mines Technical Paper 529, Government Printing Office, Washington, D. C., 1932.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Roundup proofs II photos #47-50	Description	View

BLACK DIAMOND



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML197

5.1 Site dimensions, how determined:

35,000 m^2

5.2 Features:

1) adit portal, 2) adit portal, 3) 3 x 5 m concrete foundation, 4) 2 x 15 m sandstone and wood foundation, 5) debris pile which may have been the tipple, 6) 4 x 8 m log foundation, 7) possible mine air vent, 8) possible buried adit portal, 9) coal waste dumps

5.3 Artifacts (observed, collected):

four junked mine cars

5.4 Historical information and evaluation:

The area on which the site is located was first patented to Fred F. Rolph on September 20, 1917 as a homestead entry (#601038). It is not known if Rolph first developed the small wagon mine which existed at the site during the 1920s. The mine produced about 10 tons a day when it was sampled in 1927. The traditional room and pillar method was used in the workings. The coal was undercut by hand and then shot down with black blasting powder. The coal was then run over screens to produce lump, egg, nut and slack. The mine does not appear to have been in production for a long period of time.

5.5 References

(see section 3.9 of this form)

5.6 Subsurface testing, results, methods, etc.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24ML198	1.2 Site name/field designation: Carpenter Creek Mine	1.3 County: Musselshell

1.4 Township/range:

T 9N R 30E NW 1/4 NE 1/4 NE 1/4 of Section 20

1.5 UTM:

Zone 12 272,250 Easting 5,157,900 Northing

1.6 Site type: Historic Coal Mine	1.7 Recording status & comments: recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mines Reclamation Program

1.11 General narrative description of site:

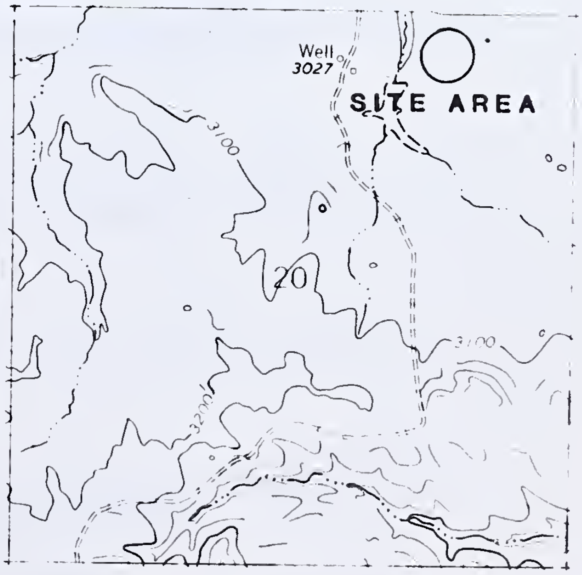
The site is located in open, rolling rangeland on a small tributary of Carpenter Creek. Most of the site area is covered with coal waste. Only a few foundations remain on the site from the mine's buildings.

1.12 Map reference:
USGS Queens Point, Mont. 1962 - 1:24,000

1.13 City/town: ☒ vicinity of
Melstone, Montana

1.14 Access to site:

Take U.S. Highway 12 west from Melstone for 4 miles. Turn south on county road and travel 2 miles and the site will be located at the corner where the road turns to the east.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML198

2.1 Geographic setting:

open, rolling rangeland

2.2 Elevation: 915 m 3000 ft.

2.3 View/aspect:

open in all directions

2.4 Major drainage:

Musselshell River

2.5 Minor drainage(s):

Carpenter Creek

2.6 Water sources:

Names Distance Ele. Change Type & seasonality

a. intermittent tributary of Carpenter Creek - adjacent to site

b.

2.7 Regional vegetation:
range grasses

2.8 Local vegetation:

range grasses and patches of sagebrush

2.9 Soils:

sandy

2.10 Surface visibility/season of survey:

good/autumn

2.11 Other environmental factors pertaining to site location:

The site area overlies the Carpenter Creek coal bed.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML198

3.1 Condition of site:
poor - little remains on the site other than foundations and coal waste

3.2 Site significance (NRHP):

The physical intdegrity of the site has been destroyed. The site is not recommended as eligible for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:

The Department of State Lands plans to either remove or reclaim the coal waste dumps on the site.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 11/9/83	3.6 Site recorded by: P. Anderson Date: 11/9/83	3.7 Revisions by: Date:

3.8 Permit No. 83-MT/ND/SD-042

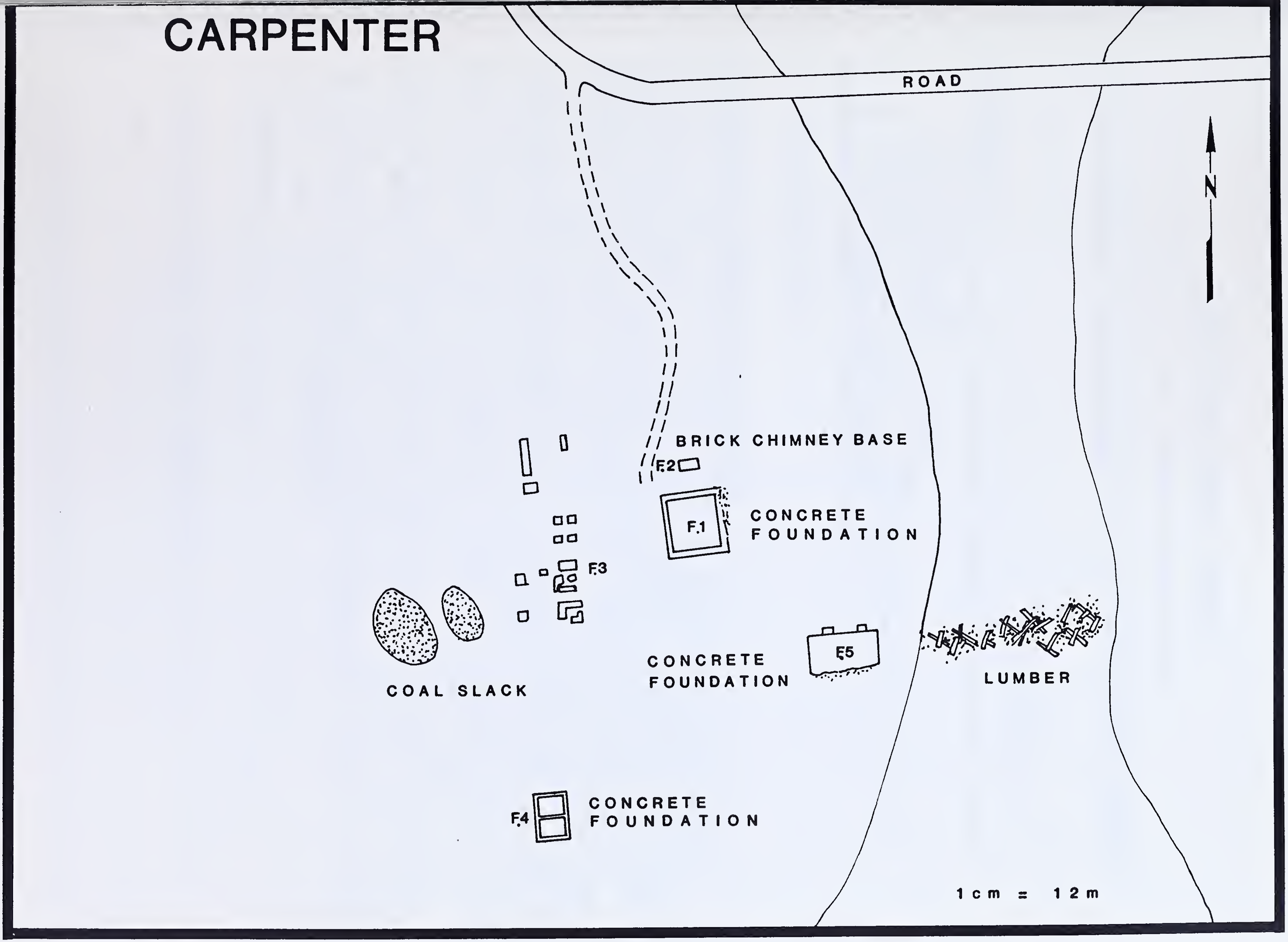
3.9 Publications concerning site: Woolsey, L.H., R.W. Richards & C.T. Lupton, The Bull Mountain Coal Field. U.S.G.S. Bulletin 647, Government Printing Office, Washington D.C., 1917.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Description	View
Roundup proofs II photos #41-46		

CARPENTER


ROAD
N
BRICK CHIMNEY BASE
F.2
F.1
CONCRETE FOUNDATION
F.3
CONCRETE FOUNDATION
F.5
LUMBER
COAL SLACK
F.4
CONCRETE FOUNDATION
1 cm = 12 m

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML198

5.1 Site dimensions, how determined:

23,000 m^2

5.2 Features:

1. 11 x 12 m concrete foundation for building which may have been the mine's boiler room
2. the brick base for a chimney
3. concrete foundations for a tipple
4. concrete tank measuring 4 x 8 m and 2.5 m deep with a middle wall
5. 7 x 21 concrete slab foundation

5.3 Artifacts (observed, collected):

miscellaneous debris

5.4 Historical information and evaluation:

The land on which the Carpenter Creek Mine was located was first patented to Charles M. Jacobs, Byron C. Jacobs, Vincent C. McCleary and Rose A. McCleary on October 20, 1910 as a cash entry patent (#158364). Two years prior to obtaining patent on the land McCleary apparently formed the McCleary Coal Company and sank a prospect shaft into the newly discovered Carpenter Creek coal field. The producing coal mine was not developed until five years later during the summer and autumn of 1913. A 138-foot vertical shaft was sunk to the coal seams and within a short time the mine was producing 600 to 700 tons a day during the winter months and employed about 180 men. A railroad spur was built from the mine to the main line of the Milwaukee Railroad. Equipment from the abandoned Davis No. 4 Mine was installed in the Carpenter Creek Mine and numerous surface buildings were constructed. Later the communities of Absher and Carpenter Creek would grow near the mine. However, during this period the McCleary Coal Company sold out to A. A. Morris, president of the 1st National Bank of Roundup in October, 1913. Morris formed the Carpenter Creek Coal Company which ran the mine for two years and then sold out to the Republic Coal Company which ran the mine until 1922 when it closed. Three years later it was reopened by H. S. Hopka, the general manager of the Roundup Coal Company, who kept the mine running until the end of the 1920s (Woolsey 1917; Cebull 1958; Roundup Record October 3, 1913; September 18, October 2, 1925; August 3, 1928; Turner 1933).

5.5 References

(see section 3.9 of this form)

5.6 Subsurface testing, results, methods, etc.

none

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24ML199	1.2 Site name/field designation: Keene No. 2 Mine	1.3 County: Musselshell

1.4 Township/range:

T 9N R 30E NW 1/4 SW 1/4 NW 1/4 of Section 26

1.5 UTM:

Zone 12 276,000 Easting 5,155,500 Northing

1.6 Site type: Historic Coal Mine	1.7 Recording status & comments: recorded, mapped and photographed

1.8 Administrative/surface ownership:	1.9 Mineral ownership:
	1.10 Project name: Department of State Lands Abandoned Mines Reclamation Program

1.11 General narrative description of site:

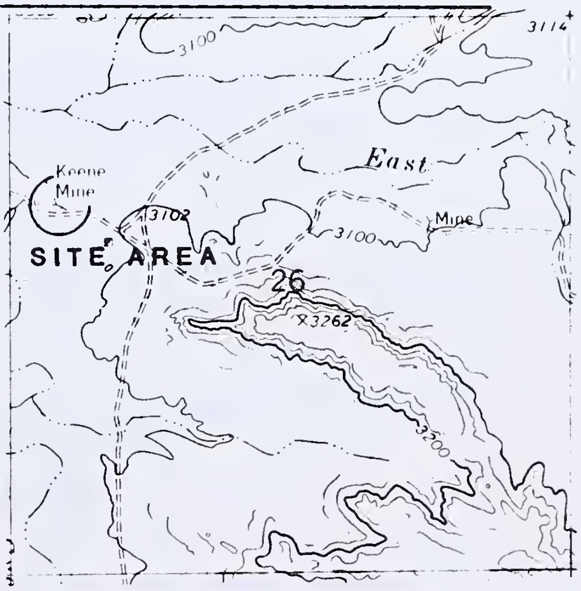
The site area is located on an open, slightly elevated rangeland surrounded by distant wooded hills. The East Fork of Carpenter Creek runs through the site at the south end and along the east edge of the site. The stream has created a swamp area where it cuts through the lower portion of the site. Many of the mine's facilities remain although most are in ruins.

1.12 Map reference:
Queens Point, Mont. 1962 - 1:24,000

1.13 City/town: ☒ vicinity of
Melstone, Montana

1.14 Access to site:

Take U.S. Highway 12 for 5 miles west from Melstone. Then turn south on county road and travel south for 2 miles, then 1 mile east, then 2 iles southeast to site area in NW1/4 of section 26.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML199

2.1 Geographic setting:

Rolling rangeland surrounded by low, wooded hills.

2.2 Elevation: 945 m 3100 ft.

2.3 View/aspect:
open in all directions

2.4 Major drainage:

Musselshell River

2.5 Minor drainage(s):

East Fork of Carpenter Creek

2.6 Water sources:

Names	Distance	Ele. Change	Type & seasonality

a. East Fork of Carpenter Creek - runs through the site

b.

2.7 Regional vegetation:

range grasses

2.8 Local vegetation:

range grasses with patches of sagebrush

2.9 Soils:
sandy

2.10 Surface visibility/season of survey:

good/autumn

2.11 Other environmental factors pertaining to site location:

The site area overlies the Carpenter Creek coal bed.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML199

3.1 Condition of site: The site is in poor condition. Most of the structures have collapsed or are deteriorating.

3.2 Site significance (NRHP):
The site was first developed in 1946 making it considerably less than 50 years old and the physical integrity of the site is badly deteriorated. The site is not recommended as eligible for listing on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the mine openings and either reclaim or remove any coal waste dumps.

3.4 Recommendations:

The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson	3.6 Site recorded by: P. Anderson	3.7 Revisions by:
Date: 11/9/83	Date: 11/9/83	Date:

3.8 Permit No. 83-MT/ND/SD-042

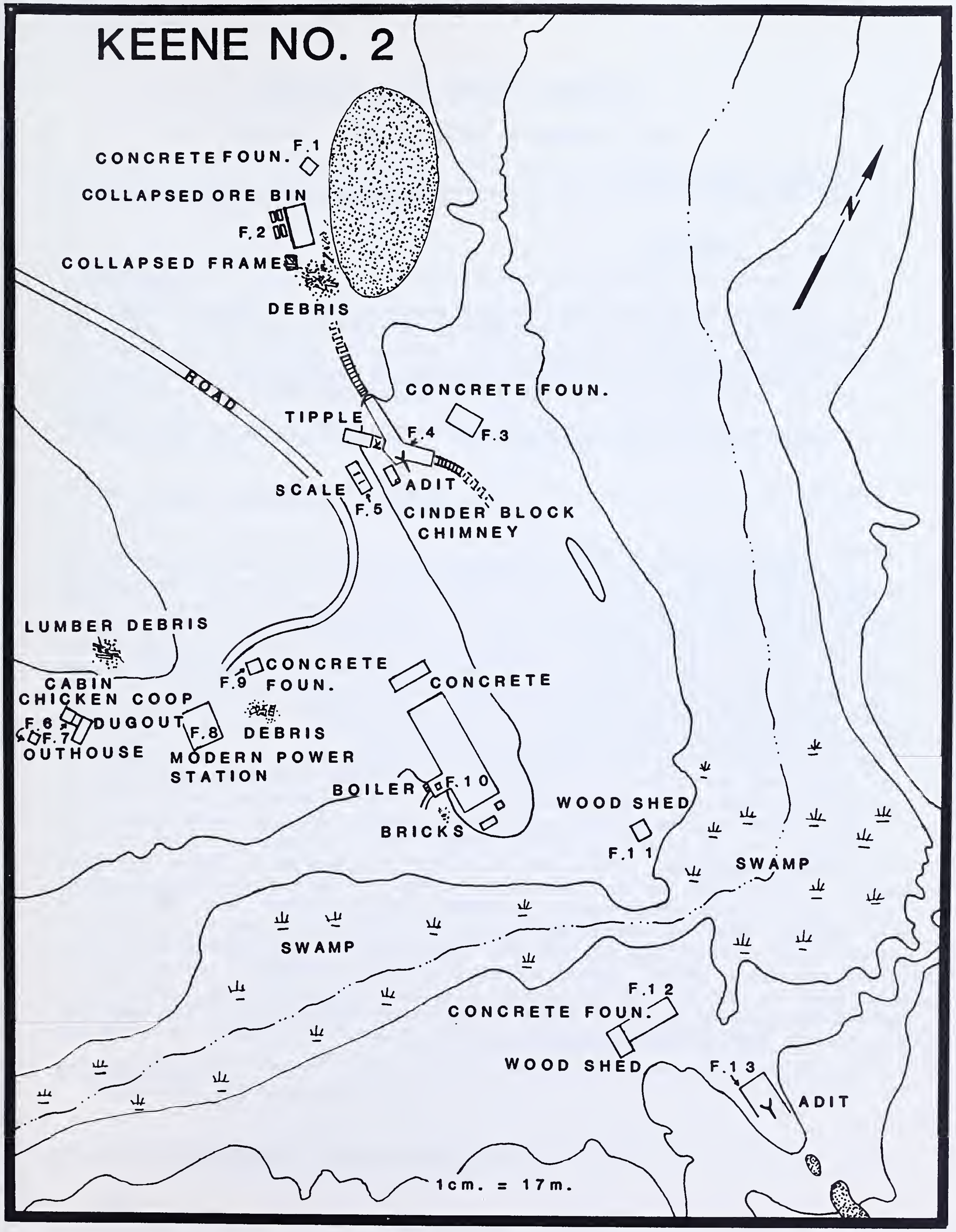
3.9 Publications concerning site: Travis, Raymond G. & Louis A. Turnbull, Coal-Mining Methods and Practices and Electric Power Requirements in the Bull Mountain Coal Field, Montana. Bureau of Mines, Report of Investigations 4684, U.S. Department of the Interior, April, 1950.

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Roundup proofs I & II	Description	View
	photos #30-40		

KEENE NO. 2


CONCRETE FOUN.
F.1
COLLAPSED ORE BIN
F.2
COLLAPSED FRAME
DEBRIS
ROAD
CONCRETE FOUN.
TIPPLE
F.4
F.3
SCALE
ADIT
F.5
CINDER BLOCK
CHIMNEY
N
LUMBER DEBRIS
CONCRETE
FOUN.
F.9
CONCRETE
CABIN
CHICKEN COOP
F.6
DUGOUT
F.7
F.8
DEBRIS
OUTHOUSE
MODERN POWER
STATION
BOILER
F.10
WOOD SHED
BRICKS
F.11
SWAMP
SWAMP
F.12
CONCRETE FOUN.
WOOD SHED
F.13
ADIT
1cm. = 17m.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML199

5.1 Site dimensions, how determined:

108,000 m^2

5.2 Features:
1) concrete foundation, 2) collapsed wood coal bin and collapsed frame structure, 3) concrete foundation, 4) foundation for tipple and adit portal, 5) foundation for scales, 6) outhouse, 7) dugout with attached chicken coop, 8) modern power sub-station, 9) concrete foundation, 10) foundation for boiler house, 11) wood shed, 12) wood shed and concrete foundation 13) adit portal

5.3 Artifacts (observed, collected): miscellaneous wood and metal debris

5.4 Historical information and evaluation:

The section in which the site is located was originally a railroad grant given to the Northern Pacific Railroad on September 29, 1910 (patent #154902). However, no attempt was made to develop a mine on the site although two prospects were sunk in the east part of section 26 during this period which showed a thick seam of coal (Woosley 1917). It was not until 1946 that the Bair-Collins Company began to develop the property as the Keene No. 2 Mine. By August of that year the mine was in production, producing about 400 tons a day. The mine immediately became a major producer and mined 79,626 tons of coal in 1947. The mine's main entrance was a drift into the outcrop which sloped down to the coal bed about 150 feet underground. The standard room-and-pillar method was used in the mine. The mine was well equipped. A five-foot fan driven by a 15-horsepower electric motor supplied 40,000 cubic feet of air per minute to the mine. One pump with a capacity of 4,000 gallons per hour kept the mine dry. Two cut-and-shear machines and one undercutting machine were in use to prepare the coal face for blasting. Then electric drills were used for the charges which were fired electrically at the end of the shift. Two track-mounted mobile loading machines were used to load the loose coal into the 38 four-ton cars used in the mine. One six-ton electric gathering locomotive was used for each loading machine and then a a 10-ton electric trolley locomotive would take the loaded cars to the storage bin on the surface. The coal was then hauled five miles to a tipple at the railhead by two 16-ton trailer trucks. About 50 men were employed in the mine. Half of the coal went to a power plant and hospital in South Dakota. The other half went to dealers for sale as domestic fuel in Montana, the Dakotas and Minnesota (Travis and Turnbull 1950; The Roundup Record-Tribune July 24, 1947).

5.5 References
(see section 3.9 of this form)

5.6 Subsurface testing, results, methods, etc.

none

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24ML200

1.2 Site name/field designation: Howard Mine

1.3 County: Musselshell

1.4 Township/range:

T 8N R 31E SW 1/4 NW 1/4 of Section 3

1.5 UTM:

Zone 12 281,710 Easting 5,151,610 Northing

1.6 Site type:

Historic Coal Mine

1.7 Recording status & comments:

recorded, mapped and photographed

1.8 Administrative/surface ownership:

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mines Reclamation
Program

1.11 General narrative description of site:

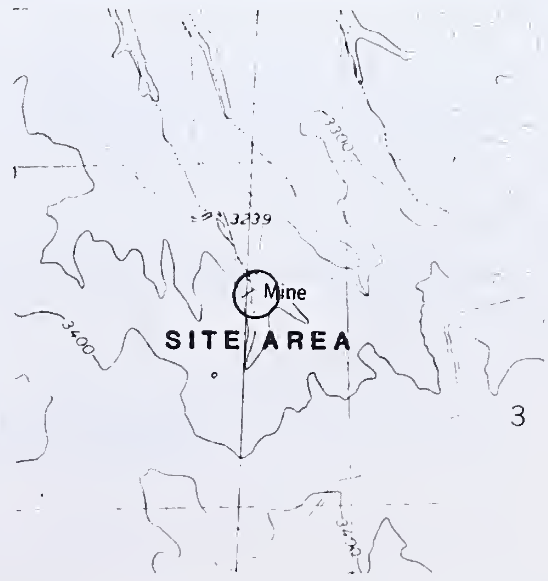
The site is located near the head of a small gully in hilly, heavily wooded country. The site consists of an open adit portal at the base of the hill on the west side of the gully. Scattered coal waste is the only remnant of the mining operation.

1.12 Map reference:
USGS Weed Creek West 1980 - 1:24,000

1.13 City/town: ☒ vicinity of
Melstone, Montana

1.14 Access to site:

Take the county road south from Melstone for 9 miles. Take the ranch road west which turns off the county road 1/4 mile north of the Cabin Creek Cemetery. Travel west for 3/4 mile and take north fork which heads northwest and then will curve back up the gully to the site area.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site Number: 24ML200

2.1 Geographic setting:

Eastern Montana ponderosa pine forest

2.2 Elevation: 994 m 3260 ft.

2.3 View/aspect:
restricted in all directions

2.4 Major drainage:

Musselshell River

2.5 Minor drainage(s):

Horse Creek

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	none on the site			
b.				

2.7 Regional vegetation:
range grasses and ponderosa pine trees

2.8 Local vegetation:

(sam as above)

2.9 Soils:
gravelly

2.10 Surface visibility/season of survey:
good/autumn

2.11 Other environmental factors pertaining to site location:

coal seam outcrops in the site area

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site Number: 24ML200

3.1 Condition of site:
nothing remains of the site except coal waste and the mine entrance

3.2 Site significance (NRHP):

The physical integrity of the site has been destroyed. The site is not recommended as eligible for lising on the National Register of Historic Places.

☐ Attachments:

3.3 Impacts:

The Department of State Lands plans to close the open mine entrance and either remove or reclaim the coal waste areas.

3.4 Recommendations:

The site has been recorded, mapped and photographed and no further work is recommended.

3.5 Site located by: P. Anderson Date: 11/9/83	3.6 Site recorded by: P. Anderson Date: 11/9/83	3.7 Revisions by: Date:

3.8 Permit No. 83-MT/ND/SD-042

3.9 Publications concerning site:

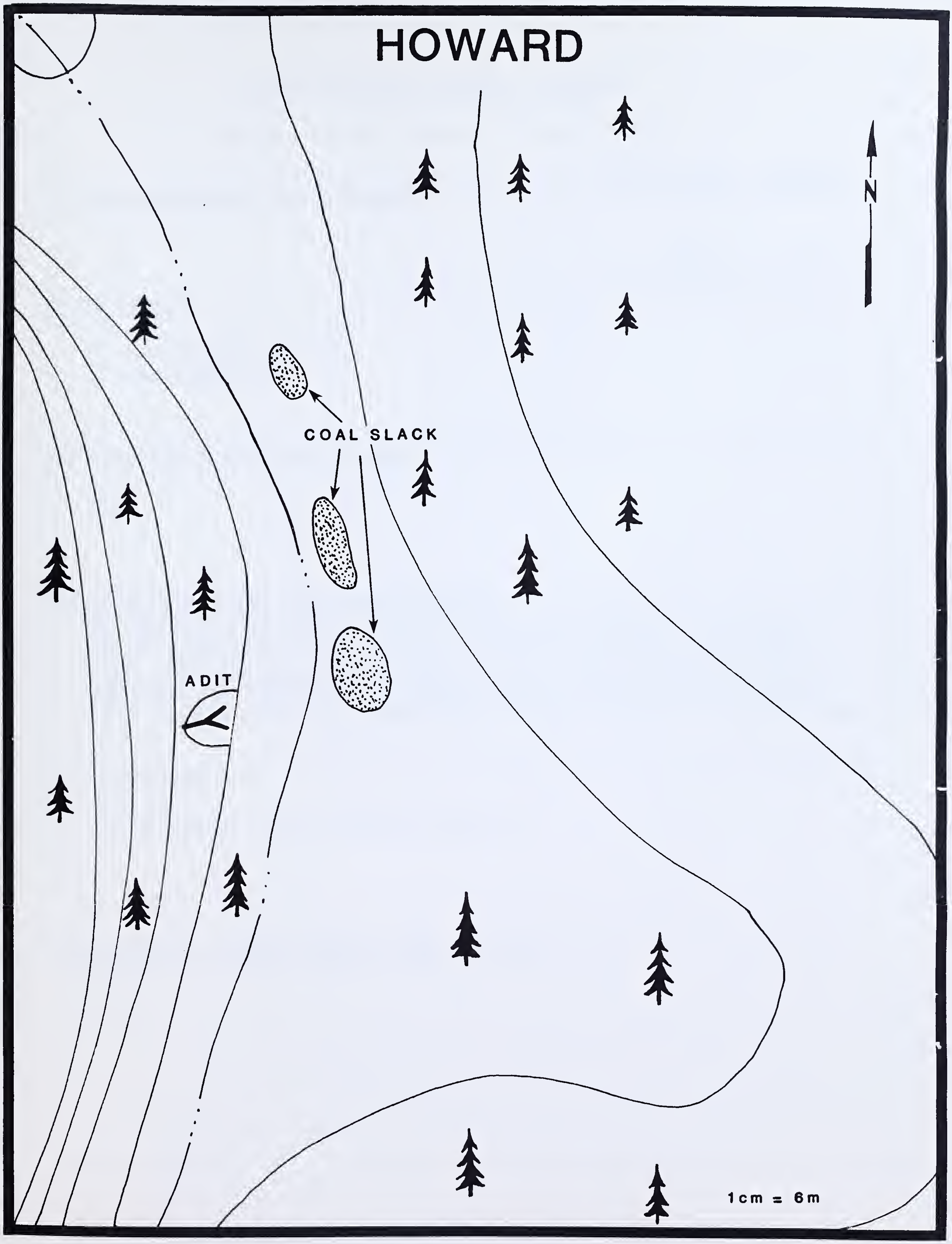
none

3.10 Artifact repository: none collected	3.11 Field notes/maps/photo repository: GCM Services, Inc., Butte, Montana

3.12 Photos & accession No:

No.	Description	View
Roundup proofs I photos #27-29		

HOWARD



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24ML200

5.1 Site dimensions, how determined:

1800 m^2

5.2 Features:

1. mine entrance portal
2. coal waste areas

5.3 Artifacts (observed, collected):

none

5.4 Historical information and evaluation:

The section in which the mine is located was originally a railroad patent given to the Northern Pacific Railroad on May 26, 1896 (patent #15). The mine was established on the site around 1919 and kept in operation until about 1930 by George Howard. The mine was a typical small wagon mine which provided coal to local ranchers for domestic use.

5.5 References

Jim and Marie Wilson - Melstone, Montana

5.6 Subsurface testing, results, methods, etc.

none